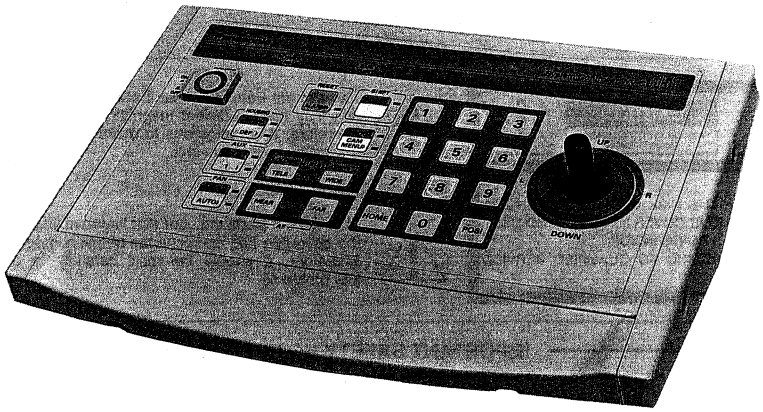
ORDER NO.AVS9603146C8

Service Manual

System Controller

WV-CU151



SPECIFICATIONS

Power Source :	WV-CU151/A, WV-CU151/B:	240V AC at 50 Hz
	WV-CU151/G:	230V AC at 50Hz
Power Consumption :	5W	
Camera Input :	Composite Video Signal :	1.0V[p-p] / 75Ω
VS/VD Input/Output :	VS Input/Output Signal :	1.0V[p-p] / 75Ω, switchable with internal
	VD Input/Output Signal :	4V[p-p] / 75Ω, switchable with internal
Video Output :	Composite Video Signal :	1.0V[p-p] / 75Ω
Alarm Output :	Open collector output :	16V DC, 100 mA max.

Lens Control

Zoom :	Tele / Wide
Focus :	Near / Far / Auto Focus
Iris :	Open / Close / Preset

Pan / Tilt Control

Manual Pan :	Right / Left
Manual Tilt :	Up / Down
Auto Pan :	On / Off
Random Pan :	On/Off

Housing Control

Wiper :	On / Off
Defroster :	On / Off
AUX 1-2 :	On / Off

Camera Control

Position Select :	Selectable 1 to 64 (max.)
Home Position :	One
Camera Setting :	Possible

Alarm

Alarm Buzzer :	On / Off
Alarm Display :	On / Off
Auto Reset / Manual Reset :	Possible

Panasonic

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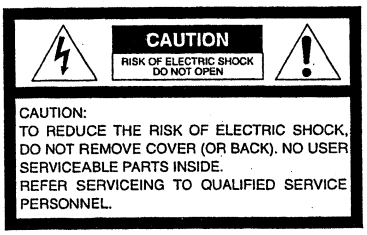
⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.



This symbol warns the user that uninsuland voltage within the unit may have suificient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit.

This symbol alerts the user that impotant literature concerning the operation and maintenance of this has been included. Therefore, it should be read carefully in order to avoid any problems.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are indicated by the ⚠ mark on the schematic diagram and the replacement parts list. It is essential that these critical parts should be repleced with manufacture's specified parts to prevent shock, fire, or other hazards.
Do not modify the original design without permission of manufacture.

Ambient Operating Temperature :	–10°C - +50°C
Ambient Operating Humidity :	Less than 90%
Dimensions :	330 (W) X 74.5 (H) X 221 (D) mm
Weight :	2.4 kg

OPTIONAL ACCESSORIES

Combination Camera.....WV-CS600/WV-CS400
Receiver.....WV-RC100/WV-RC150/WV-RC170
Rack Mount Angle WV-Q62

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

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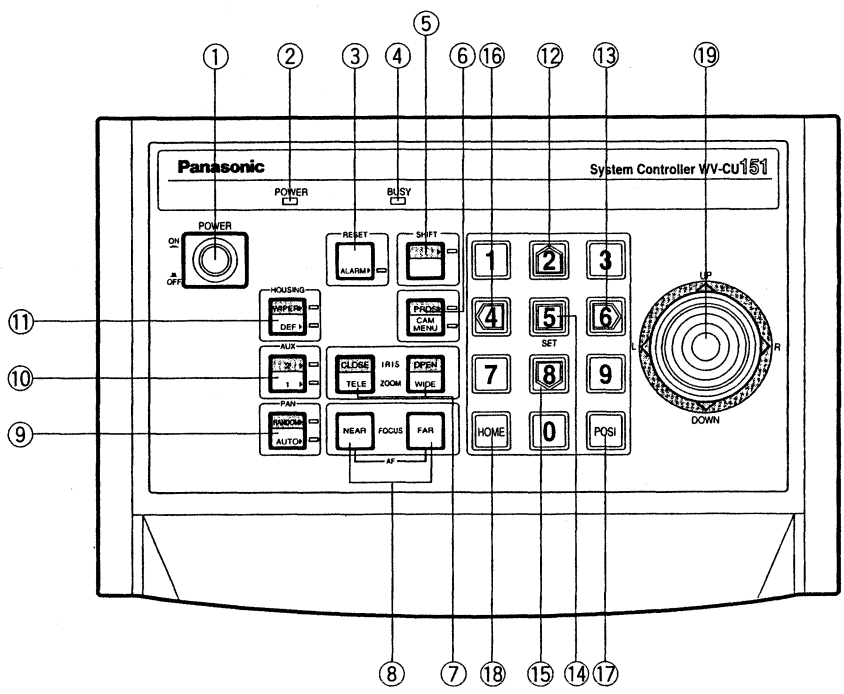
MAJOR OPERATING CONTROL AND THEIR FUNCTIONS

■ Front Panel



1. **Power ON/OFF Switch (POWER: ON/OFF)**
   This switch is used to turn on and off the power of the unit.
   Note: When the power switch is turned on, the power for the camera which is supplied by the Receiver becomes on. However, when the power switch is turned off while the camera and the Pan-tilt head are working, the Receiver keeps supplying the power to the camera and the pan-tilt head.

2. **Power Indicator**
   Indicates the Power On.

3. **Alarm Reset Switch (ALARM RESET)**
   Used to reset the alarm signal manually.
   The LED on this switch will light off from blinking after completing the reset.
   When this unit is return to the initial mode due to the automatic reset function or recover signal supply, the LED on this switch will light on from blinking.

4. **Busy Indicator (BUSY)**
   Indicates the busy condition.
   To operate this unit is not possible during lighting.

5. **Shift Switch (SHIFT)**
   Used to select the functions of the Program Selection Switch, Panning Selection Switch, Auxiliary Selection Switch, Zoom/Iris Switches and Housing Switch.
   Lighting: Selects the PROG, CLOSE, OPEN, WIPER, AUX2 or RANDOM.
   Lighting Off: Selects the CAM MENU, TELE, WIDE, DEF, AUX1 or AUTO.

6. **Camera / Program Menu Selection Switch (CAM MENU/PROG)**
   Used to select the display menu.
   CAM MENU: Displays the set up menu of the camera.
   PROG: Displays the program menu of this unit.
   CAM MENU and PROG selection should be made in accordance with the Shift Switch setting.
   When the selected function is activated, its indicator will light.

7. **Zoom / Iris Control Switch (ZOOM: TELE/WIDE, IRIS: CLOSE/OPEN)**
   ZOOM : Controls the lens zoom. (Tele - Wide)
   IRIS: Controls the lens iris. (Close - Open)
   When the shift switch lights, the open or close position can be selected.
   Note: This control works to the specified camera, such as the WV-CS600 or WV-CS400.

8. **Focus Control Switch (FOCUS: NEAR /FAR)**
   Used to control the lens focus.

9. **Panning Selection Switch (PAN: AUTO, RANDOM)**
   Selects the automatic or random panning.
   The movement of the random panning has been pre-programmed by a micro-processor in the specified receiver. The random panning functions when the specified pan/tilt head is used.
   The automatic random functions when WV-CS600, WV-CS400 or the equivalent is used.
   - When the shift switch lights, the random panning can be selected.

10. **Auxiliary 1 / 2 Selection Switch (AUX: 1/2)**
Used to control the user's auxiliary equipment.
AUX1: Turn off the Shift Switch to select this position.
AUX2: Turn on the Shift Switch to select this position.

11. **Housing Switch (HOUSING: WIPER / DEF)**
Used to control the wiper or defroster of the housing.
WIPER: Turn on the Shift Switch to select this position.
DEF: Turn off the Shift Switch to select this position.

12. **Up Switch (2)**
This switch is used to move the cursor (on the program or camera menu) in the up direction.

13. **Right Switch (6)**
This switch is used to move the cursor (on the Set up or Program Menu) in the right direction.

14. **Set Switch (5)**
The mode selected in the program or camera setup menu is enabled by pressing this switch.

15. **Down Switch (8)**
This switch is used to move the cursor (on the Set up or Program Menu) in the down direction.

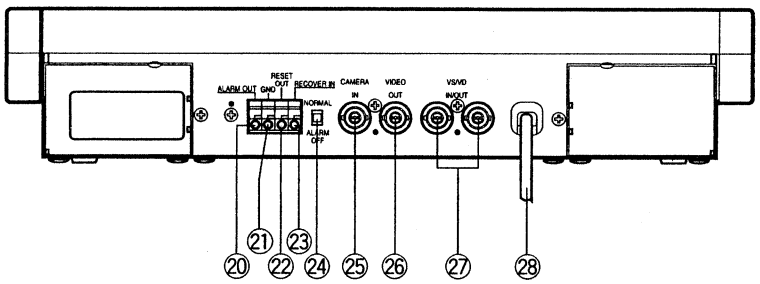
16. **Left Switch (4)**
This switch is used to move the cursor (on the Set up or Program Menu) in the left direction.

17. **Position Switch (POSI)**
Used to turn the pan/tilt head to the preset position. Select the desired position in accordance with the preset number.

18. **Home Position Switch (HOME)**
Used to turn the pan/tilt head to the home position of the Combination Camera WV-CS600.

19. **Joystick Controller (UP / DOWN / RIGHT / LEFT)**
This is a joystick type switch. The specified pan/tilt head can be controlled manually by moving this controller.

■ Rear Panel



20. **Alarm Output Terminal (ALARM OUT)**
The alarm output signal is provided at this terminal for the Time Lapse VTR.
(Open corrector output, 16V DC or less, 100mA or less)

21. **Ground Terminal (GND)**

22. **Reset Output Terminal (RESET OUT)**
When the controller resets the activated alarm by pressing the Alarm Reset Switch, the alarm reset output signal is provided at this terminal for the Time Lapse VTR.
Note: Be sure to set the internal switch to the VTR position.
Refer to the Dip switch Setting on page 5 for detail.

23. **Recover Input Terminal (RECOVER IN)**
Accepts the recover signal from the Time Lapse VTR.

24. **Mode Selection Switch (NORMAL / ALARM OFF)**
Used to select the activated mode.

25. **Camera Input Connector (CAMERA IN)**
This connector accepts the multiplexed video and control data signal from the WV-CS600, WV-CS400 or specified receiver.

26. **Video Output Connector (VIDEO OUT)**
The composite video signal is provided at this connector. The control data signal does not include in the video output signal.

27. **External Gen-lock Input / Output Connector (VS/VD IN/OUT)**

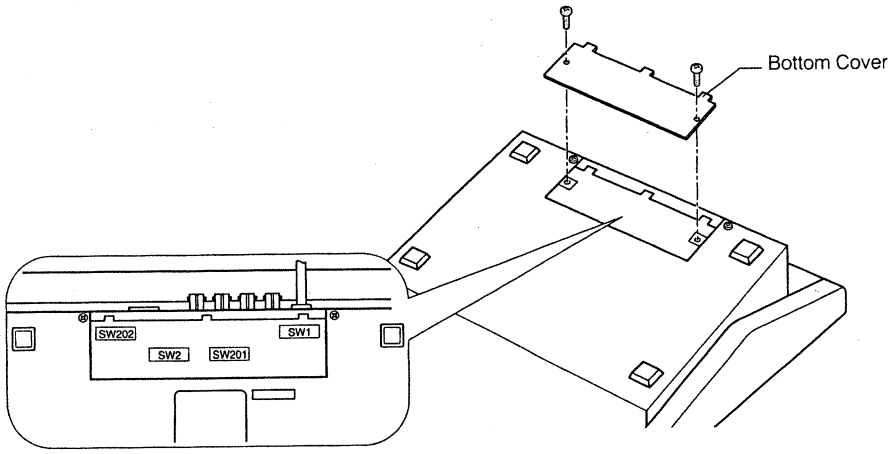
28. **Power Cord**

CONNECTIONS

• Dip Switch Setting

Before connecting this controller, confirm the Dip Switch Setting if the system setting change is required.
The following setting procedure should be made by qualified service personnel or system installers.

Preparation: Take off the bottom cover by removing the two fixing screws.

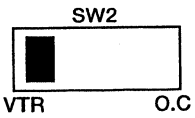


1. SW2

Set this switch (SW2) to choose the alarm reset output signal as either Open Collector (O.C.) or Pulse (VTR).

Open Collector (O.C.): 16V DC 100mA max.
Pulse (VTR) : +5V DC approx. 500msec.

Initially, VTR position is selected at the factory.



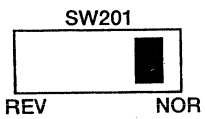
2. SW201

Set this switch (SW201) to choose the character display mode on the monitor.

NOR : White with Black border

REV : Black with White border

Initially, normal (NOR) position is selected at the factory.

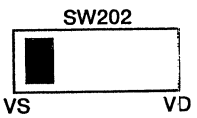


3. SW1

Confirm switches (SW1) on the board are set to the position as shown. These switches are used only for factory test.

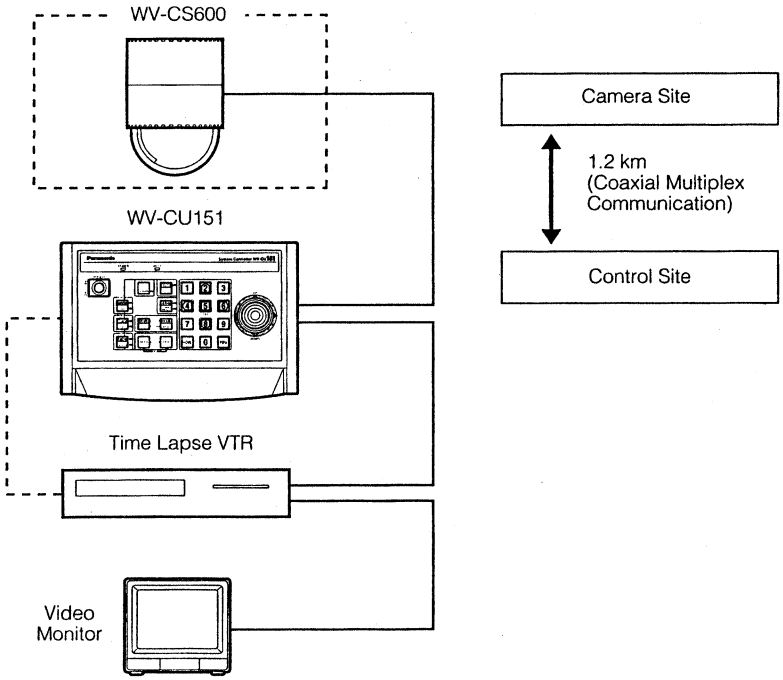
4. SW202

Set this switch to choose the External Gen-lock Input signal as either VS or VD.
VS position is preset at the factory.

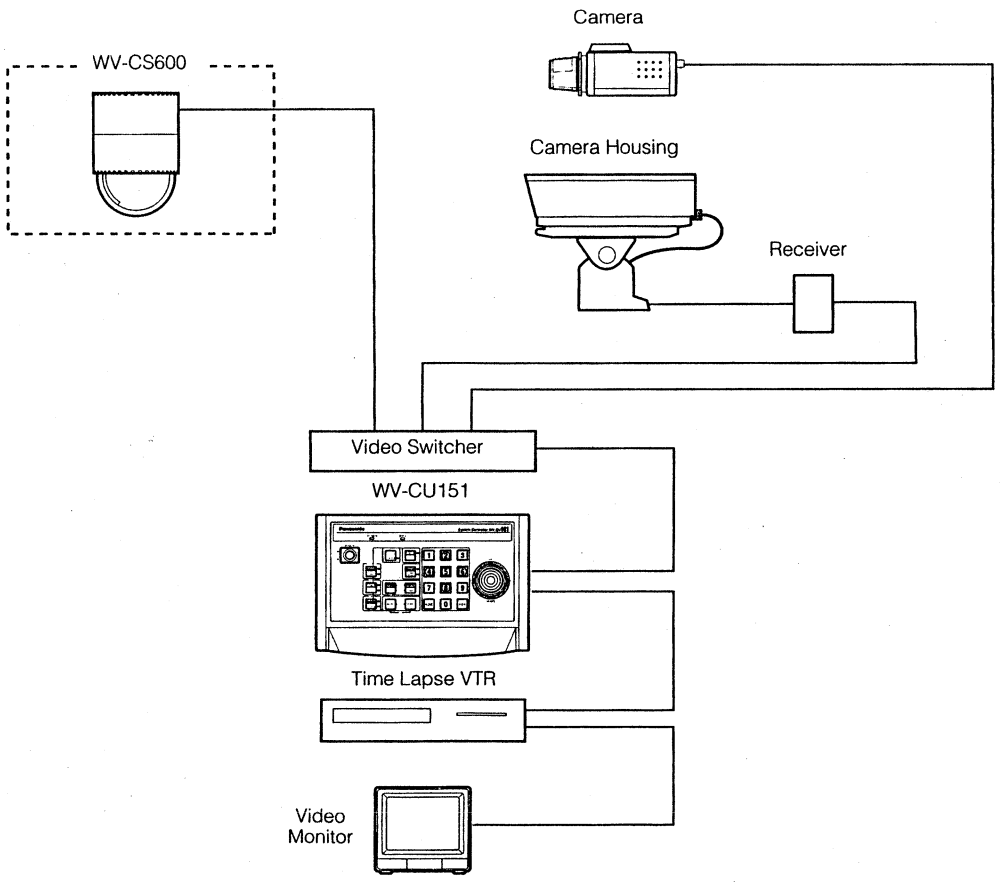


SYSTEM CONNECTION

■ Basic Connection



■ Application 1 Connection with the Video Switcher

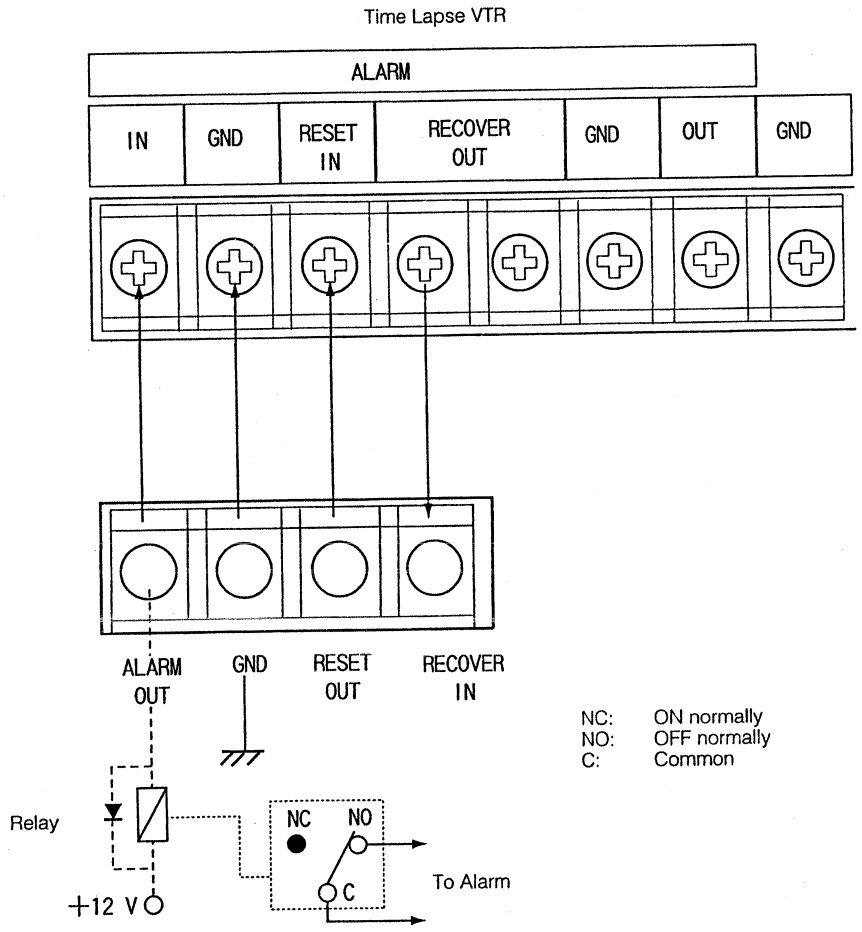


■ Application 2 Connection with the Time Lapse VTR

• Connection of Alarm Output Terminal

Make sure the polarity of the buzzer to meet with this terminal.
The positive (+) terminal of the buzzer should be connected with the Alarm Output Terminal.
The Alarm Output Terminal is composed of the Open Collector Output and the capacity is 16V DC, 100mA or less.

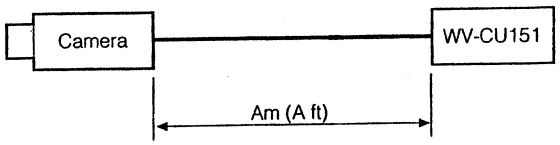
(1) In case the buzzer is operable within the capacity of Alarm Output Terminal, connect buzzer as shown below.
(2) In case the buzzer is not operable within the capacity of Alarm Output Terminal, the external relay unit should be used as shown below.



<For examples>

■ Cable-loss Compensation Setting

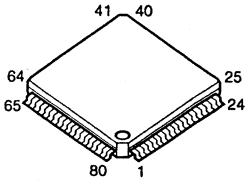
The maximum cable length in the system is approximately 900 meter (3000 ft).
See the diagram below and set up the cable-loss compensation switch for each unit accordingly.



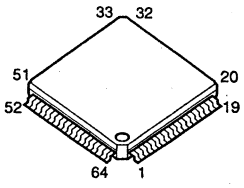
Cable length (with RG-59U BELDEN 9259 or equivalent)	Position of the Cable comp of program menu for WV-CU151
unit: meter (ft)	
0 (0) ≤ A < 400 (1300)	→ S
400 (1300) ≤ A < 700 (2300)	→ M
700 (2300) ≤ A < 900 (3000)	→ L

APPEARANCE OF IC, TRANSISTOR AND DIODE

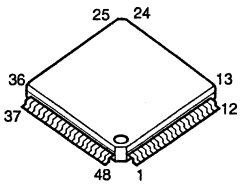
YW78P054G151



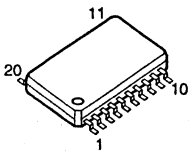
YWCF37808PG



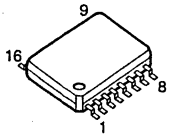
YWUPC5022094



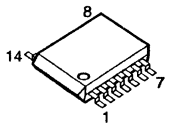
YWBU5999FS



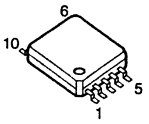
MC74HC4053F
MC74HC4538AF



YWMC74HCU04F
YWMC74HC00AF



YWX25642S8



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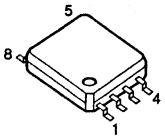
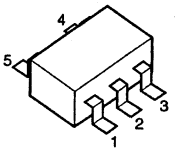
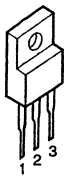


YWSC7S08F

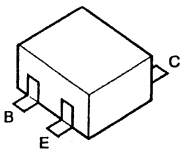


YWNJM78M09FA
YWNJM78M05FA

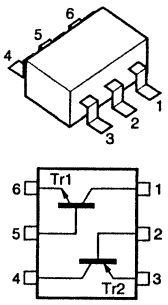


1: Input
2: Ground
3: Output

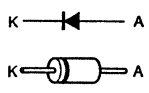
DTC123EK
DTD114
MSB709-QRS
MSD601-QRS
YWDTC114EK97



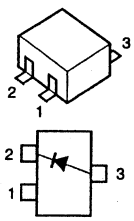
IMZ1T9



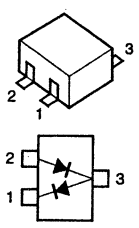
YW1SS132



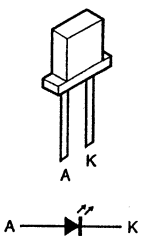
YWDAN212K



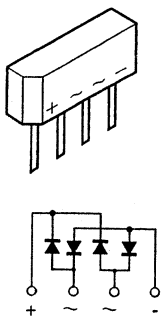
YWDAN217



YWSLB24YY
YWSLB24MG
YWSLB24VR



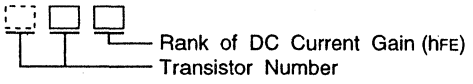
S1VB10



CHIP COMPONENTS

1. Chip Transistor

The transistor number is indicated on the top surface of the chip transistor using two alphabet letters or one numerical number and two alphabet letters.



Transistor Number

(Chip Transistor)

Letter	Transistor No.	Letter	Transistor No.
A	2SB709	X	2SD602A
B	2SB709A	Y	2SD601
C	2SB710	Z	2SD601A
D	2SB710A	1A	2SB799
E	2SA1022	1B	2SB814
F	2SA1034	1C	2SB902
H	2SA1035	1F	2SK321
I	2SB792	1K	2SK316
K	2SC2778	1L	2SK247
P	2SD814	1M	2SJ84
Q	2SD813	1N	2SK199
R	2SC2480	1O	2SK198
S	2SC2405	1T	2SC3077
T	2SC2406	1X	2SC2845
U	2SC2404	1Z	2SD1030
V	2SC2295	2B	2SK374
W	2SD602	2C	2SK116
BQ	2SB766A	UMT	2SC4081

(Small Chip Transistor)

Letter	Transistor No.
A	2SB1218
B	2SB1218A
D	2SB1219A
U	2SC3931
W	2SD1820
X	2SD1820A
Y	2SD1819
E3	2SA1226
OS	2SB1219
UC	2SA1532
YU	2SC3938

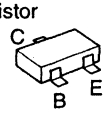
(Pair Transistor)

Letter	Transistor No.	Letter	Transistor No.
5R	XN1501	5H	XP4501
7S	XN1601	5C	XP4601
5H	XN4501	5H	XP4501
5C	XN4601	5L	XP5501
5L	XN5501	4N	XP5601
4N	XN5601	7S	XP6501
5N	XN6501	7W	XP6435
7W	XN6435	7F	XP6534
7F	XN6534	X1	UMX1
5R	XP1501	Z1	UMZ1
7S	XP1601		

Example: WQ → 2SD602-Q
YQ → 2SD601-Q
1BS → 2SB814-S

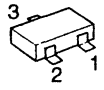
Appearance and Symbols

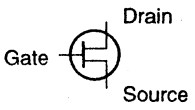
Transistor



C: Collector
B: Bass
E: Emitter

FET

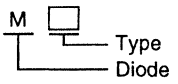




	1	2	3
Eacept 2SK199	Drain	Source	Gate
2SK199	Gate	Drain	Source

2. Chip Diode

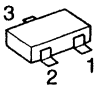
The diode number is indicated on the top surface of the chip diode using two alphabet letters.



Diode Number

	1	2	3
MA28/MA28W/MA28T	–	Anode	Cathode
MA151K/MA152K	–	Anode	Cathode
MA151A/MA152A	–	Cathode	Anode
MA151WK/MA152WK	Anode	Anode	Cathode
MA151WA/MA152WA	Cathode	Cathode	Anode
MA153	Cathode	Anode	Common
MA141K	–	Anode	Cathode
MA143	Anode	Cathode	Common
MA3062	Anode	–	Cathode
RD421D	Anode	–	Cathode

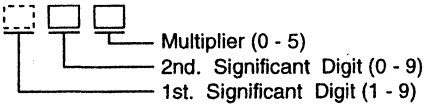
Appearance and Symbol



	1	2	3
MA28/MA28W/MA28T	–	Anode	Cathode
MA151K/MA152K	–	Anode	Cathode
MA151A/MA152A	–	Cathode	Anode
MA151WK/MA152WK	Anode	Anode	Cathode
MA151WA/MA152WA	Cathode	Cathode	Anode
MA153	Cathode	Anode	Common
MA141K	–	Anode	Cathode
MA143	Anode	Cathode	Common
MA3062	Anode	–	Cathode
RD421D	Anode	–	Cathode

3. Chip Resistor

The resistor value is indicated on the bottom surface of the chip resistor using three digit numbers.



Example:

330 → $33 \times 10^0 = 33\ \Omega$
561 → $56 \times 10^1 = 560\ \Omega$
123 → $12 \times 10^3 = 12\ k\Omega$

Note: Zero ohm resistor (jumper chip) is colored red or green.

4. Chip Capacitor

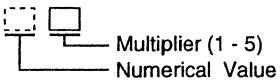
The capacitive value of replacement chip capacitors is indicated on the bottom surface. original parts do not have value indication.

If the capacitive value is less than 100 pF, the value will be indicated by one or two digit number expressing the capacity directly in pF.

Example:

0.5 → 0.5 pF 2.5 → 2.5 pF
.75 → 0.75 pF 33 → 33 pF
1 → 1 pF 82 → 82 pF

If the capacitive value is 100 pF or greater, the value will be indicated by an alpha-numeric code. The letter precedes the number and expresses a numerical value to be multiplied by the number which follows.



Numerical Value

Letter	Value	Letter	Value
A	10	N	33
B	11	P	36
C	12	Q	39
D	13	R	43
E	15	S	47
F	16	T	51
G	18	U	56
H	20	V	62
J	22	W	68
K	24	X	75
L	27	Y	82
M	30	Z	91

* Letters I and O are not used.

Example: A1 → 10×10^1 = 100 pF
N2 → 33×10^2 = 3300 pF
S3 → 47×10^3 = 47000 pF

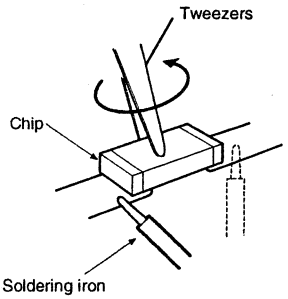
5. Precautions in replacing the chip component

1. Make sure that the unit is turned OFF when replacing the chip.
2. Use tweezers to prevent any damage to the chip surface.
3. Do not re-use the chips after removal.
4. Do not rub the electrode of chips.
5. Do not subject the chips to excessive stress.
6. It is recommended that a pencil-type soldering iron to be used.
7. The solder whose diameter is less than 0.5 mm is recommended.
8. Do not heat the chip beyond 3 second.
9. Maintain temperature control under 260°C (500°F) when soldering.

5-1. Removal (Transistor, Diode, Resistor and Capacitor)

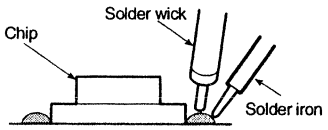
1. Add the solder to both ends of the chip (three leads for chip transistor).
2. While attaching the soldering iron to both ends of the chip (three leads for chip transistor) as shown below, remove the chip by turning with tweezers.

Note: Be careful not to damage other chips.

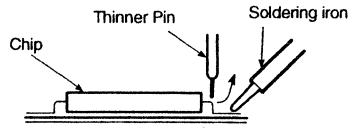


5-2. Removal (IC)

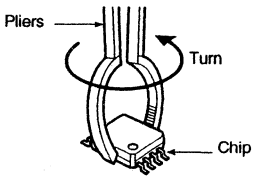
1. Add the solder wick and soldering iron to each lead of the IC and remove solder.



2. Add the soldering iron to each lead of the IC and left each lead of the IC using thinner pin.

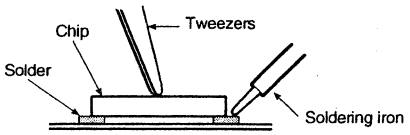


3. Remove IC turning it with pliers.

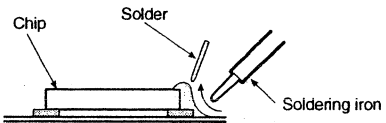


5-3. Mounting

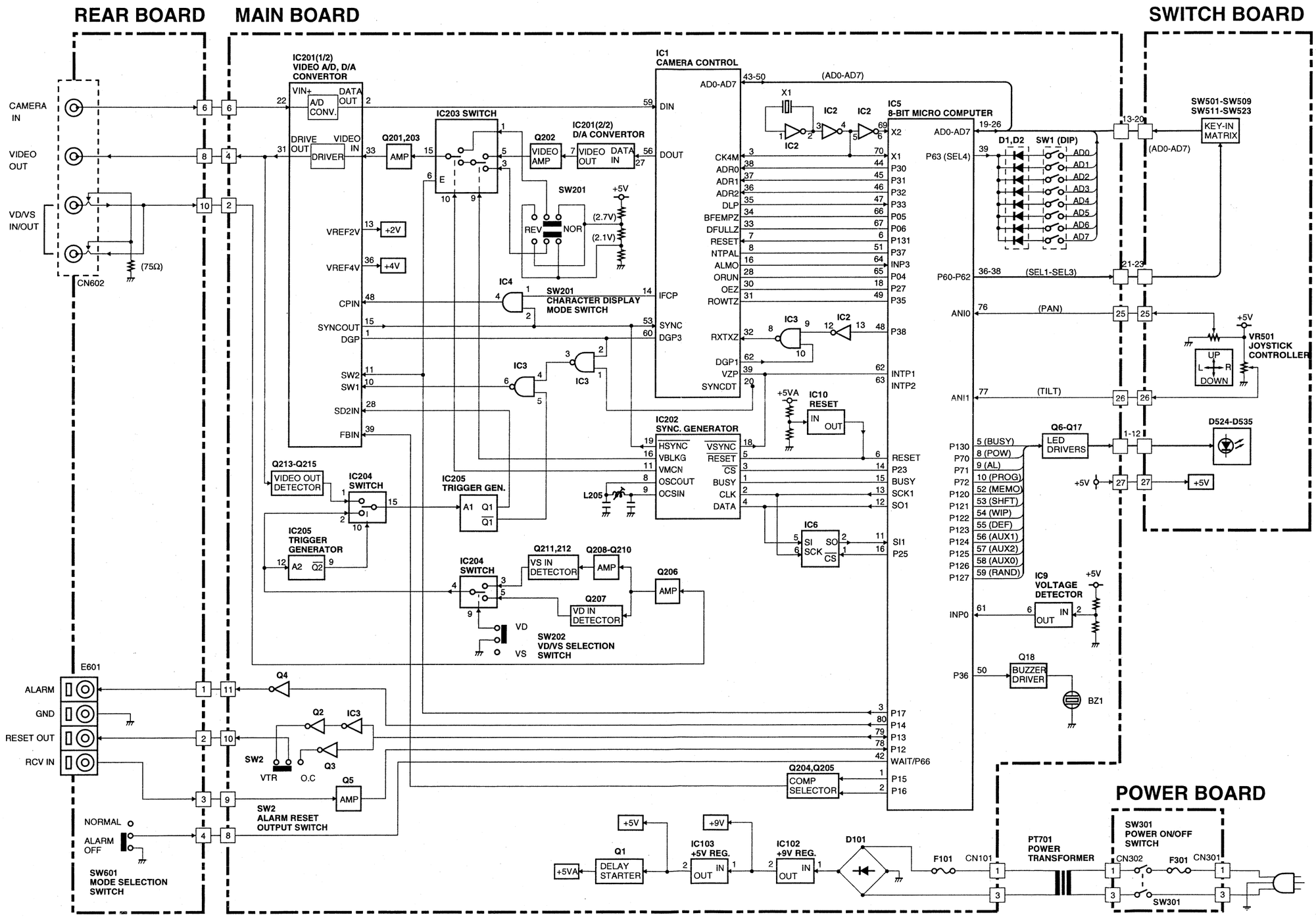
1. Place the solder thinly on the chip mounting foil.
2. Solder the chip temporarily while holding the chip with the tweezers.



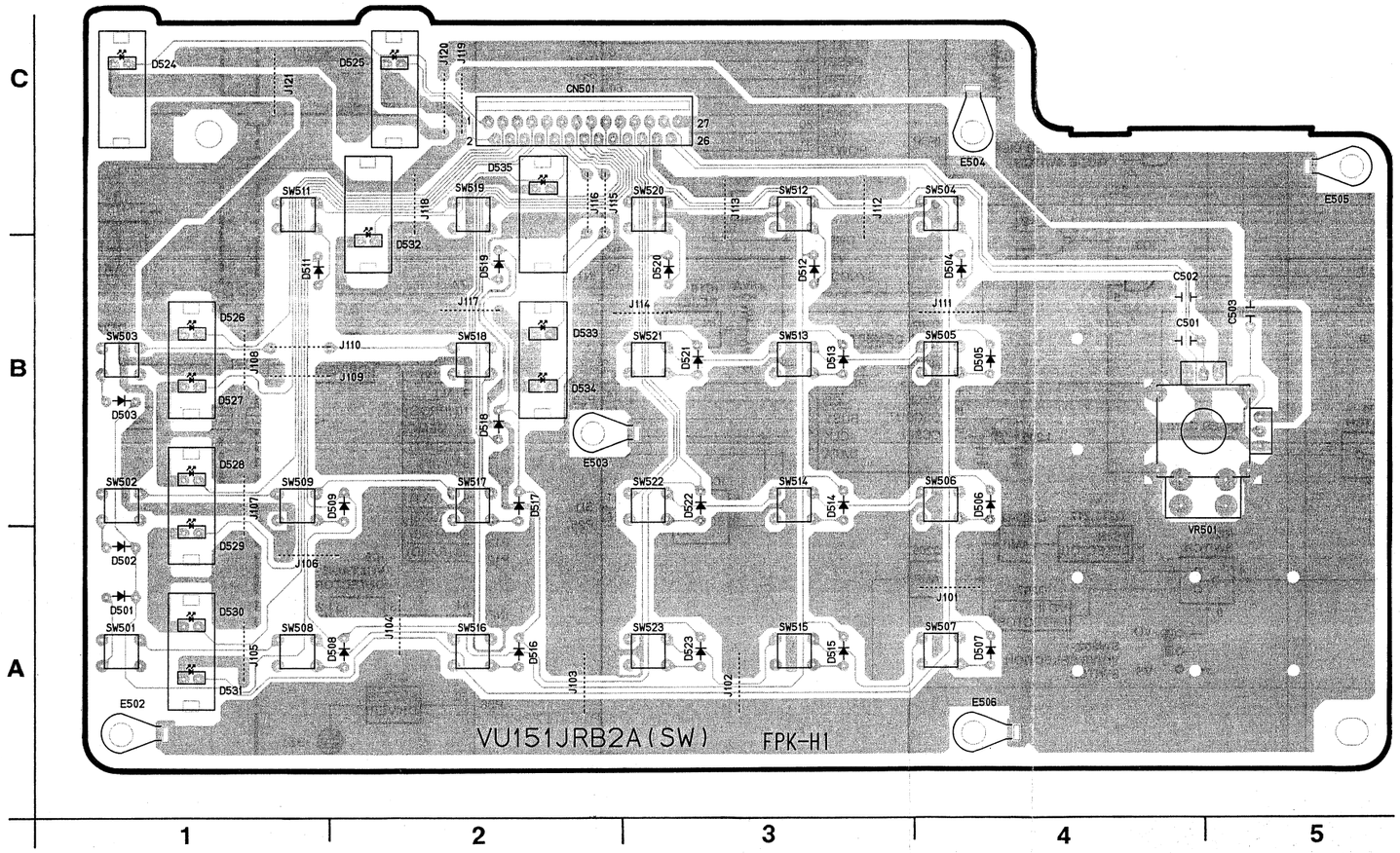
3. Solder both ends of chip (three leads for chip transistor).



BLOCK DIAGRAM



CONDUCTOR VIEW OF SWITCH BOARD

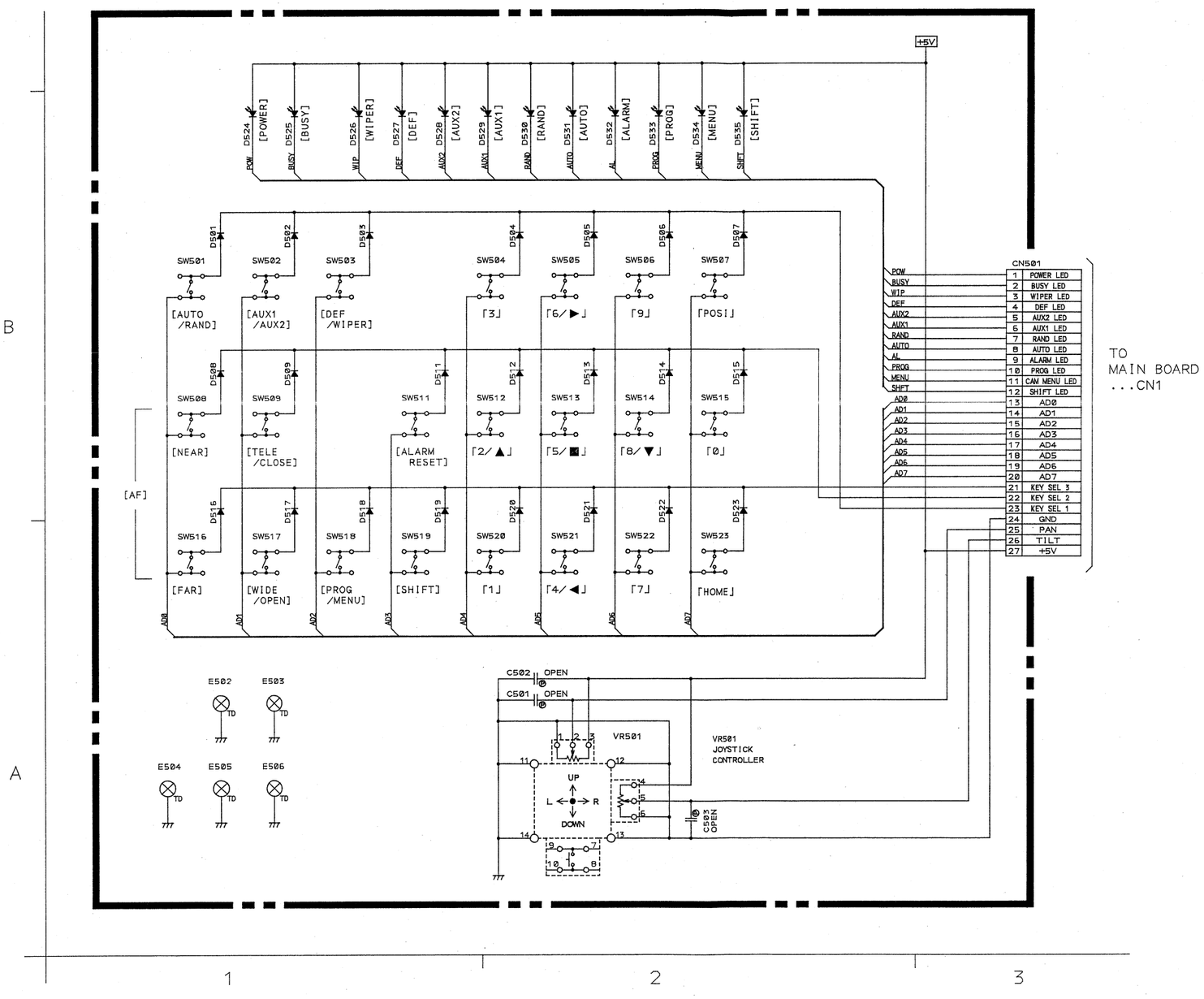


<INDEX>

SWITCH BOARD

D501	A1
D502	A1
D503	B4
D504	B4
D505	B4
D506	B4
D507	A4
D508	A2
D509	B2
D511	B1
D512	B3
D513	B3
D514	B3
D515	A3
D516	A2
D517	B2
D518	B2
D519	B2
D520	B3
D521	B3
D522	B3
D523	A3
D524	C1
D525	C2
D526	B2
D527	B1
D528	B1
D529	A1
D530	A1
D531	A1
D532	B2
D533	B2
D534	B2
D535	C2

SCHEMATIC DIAGRAM OF SWITCH BOARD



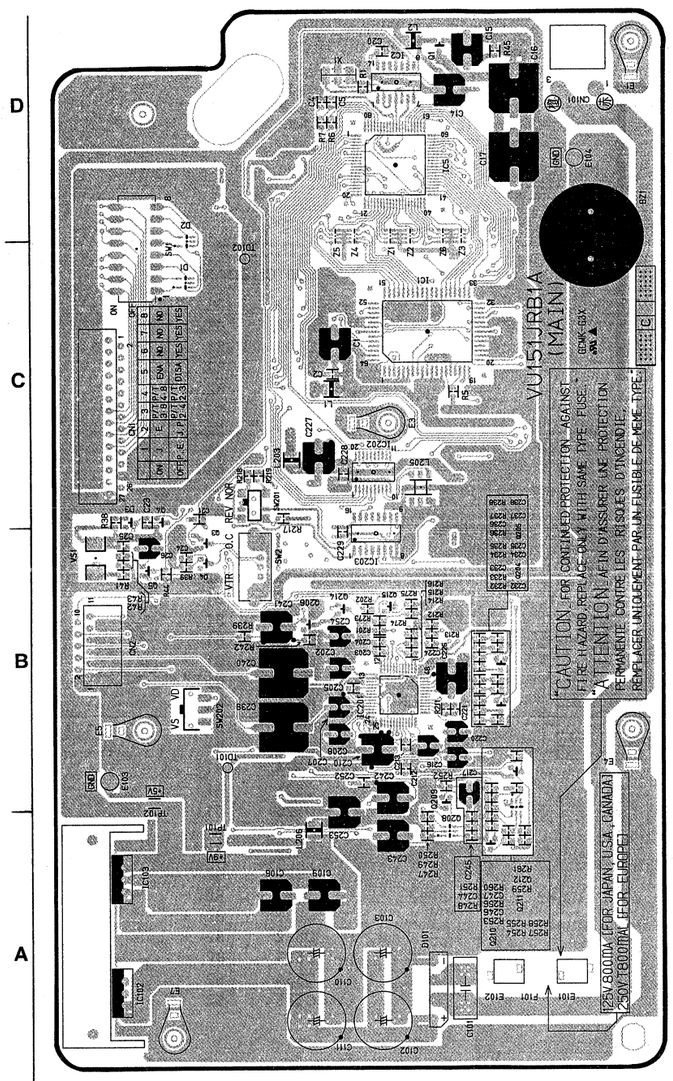
<INDEX>

SWITCH BOARD

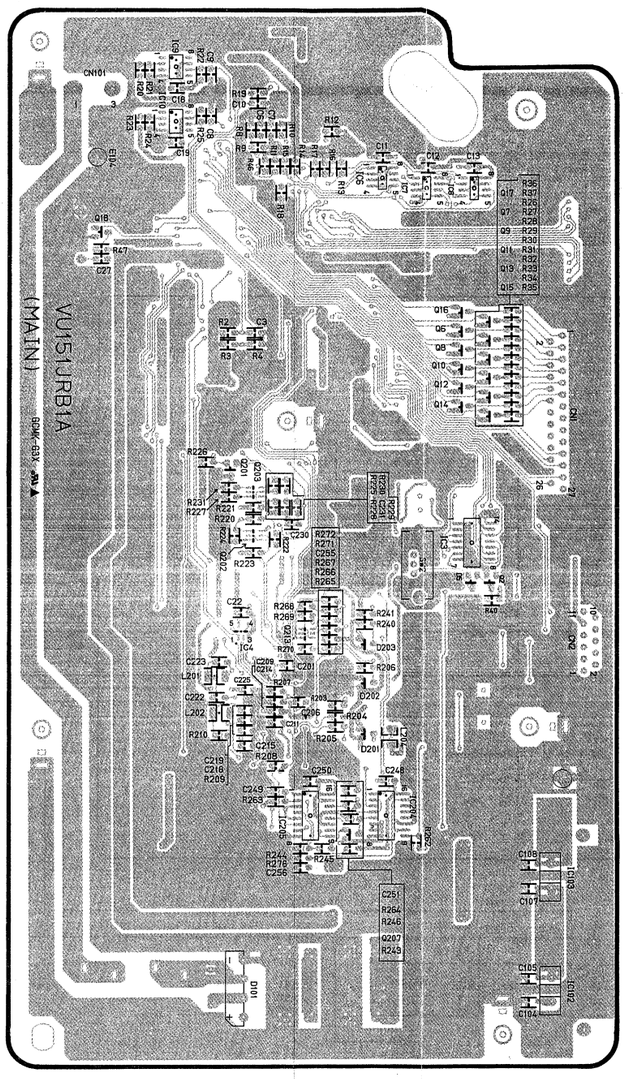
D501	B1
D502	B1
D503	B1
D504	B2
D505	B2
D506	B2
D507	B2
D508	B1
D509	B1
D511	B1
D512	B2
D513	B2
D514	B2
D515	B2
D516	B1
D517	B1
D518	B1
D519	B1
D520	B2
D521	B2
D522	B2
D523	B2
D524	B1
D525	B1
D526	B1
D527	B1
D528	B1
D529	B2
D530	B2
D531	B2
D532	B2
D533	B2
D534	B2
D535	B2

CONDUCTOR VIEW OF MAIN BOARD

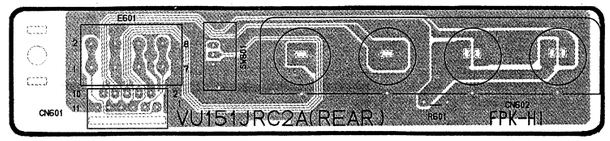
(COMPONENT SIDE VIEW)



(PATTERN SIDE VIEW)

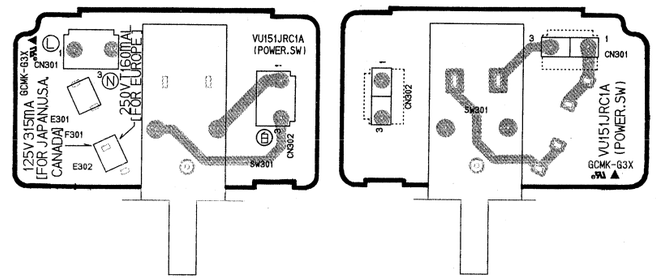


REAR BOARD



POWER BOARD

(COMPONENT SIDE VIEW) *(PATTERN SIDE VIEW)*



1 2 3 4 5 6 7
D C B A

<INDEX> **MAIN BOARD**

IC1	C2	IC201	B2	Q1	D2	Q11	C5	Q203	C4	Q213	B4	D1	C1
IC2	D2	IC202	C2	Q2	B5	Q12	C4	Q204	B2	Q214	B2	D2	D1
IC3	B4	IC203	B2	Q3	B1	Q13	C5	Q205	B2	Q215	B2	D3	C1
IC4	B4	IC204	B4	Q4	C1	Q14	C4	Q206	B1			D4	B1
IC5	D2	IC205	A4	Q5	B1	Q15	C5	Q207	A4			D5	B4
IC6	D4			Q6	C4	Q16	C4	Q208	A2			D101	A2
IC9	D3			Q7	D5	Q17	D5	Q209	B2			D201	B4
IC10	D3			Q8	C4	Q18	D3	Q210	A2			D202	B4
IC102	A1			Q9	D5	Q201	C4	Q211	A2			D203	B4
IC103	A1			Q10	C4	Q202	B4	Q212	A2				

E

D

C

MAIN BOARD

SW2
ALARM RESET
OUTPUT SWITCH

+5V
VTR
O.C
SW2
D4
D5
D3
Q2
Q3
Q4
Q5
IC3
R40 472
R39 561
R38 561
R41 561
R42 563
R43 562
R44 223
C24 222
C23 222
C25 222
C26 4R7/25
VS1
ALRST
ALOUT
RCVIN
MODE
777

IC1
L1 6R2
C1 47/16
C2 104
+5V
IFFLD
SYNC
INVO
INVI
DOUT
GND
VCC
DIN
DGP3
DGP2
DGP1
GND
OSCI
OSCO
CXO
CK 4M
GND
TEST1
TEST2
RESET
NTPAL
VCC
GND
CPC
HSYNC
VD2
FCP
TMS
ALMO
ALMI
RSS
TSS
RXTXZ
ROWTZ
OEZ
CSZ
ORUN
VSYS
GND
VCC
RBCLR1
RBCLR
TBCLR1
HSYS
SYNCOT
777
R2 225
R3 OPEN
R4 OPE!
R5 225
C3 104
RDWT
OEGA
ORUN
RXTX 13
SYDET
ALM
NTPAL
RSTOA

IC2
IC3
C20 104
C21 104
VCC
GND
777

IC2
IC2
IC3
IC3
IC4
+5V
C22 104
R217 472
R218 112
R219 331

R216 682
R215 OPEN
R214 331
R213 101
R212 223
R201 331
R202 331
C201 104
C202 22/16
C203 OPEN
C204 331CHJ
C224 331
C225 104
C226 47/16
C223 ※
L201 8R2
C222 104
C221 OPEN
R211 102
C220 22/16
L202 22
C218 220
C219 220
R209 102
R210 102
C232 R232

REF No.	NTSC	PAL
C223	241	161

IC201
VREF 2V
NC
SYNC OUT
Y IN
NC
NC
GND2
V2 OUT
V2C
V1N+
V1N-
V1OUT
CP IN
NC
CLAMP SW
CLAMP IN
+5V
NC
NC
COMP OUT
FB OUT
FB IN
COMP IN
NC
SW2
SW3
GND1
NC
VIDEO OUT
Y3
Y2
SEPA LEVEL
NC
DATA OUT
DGP
NC
DATA IN
VD2 IN
VD2 OUT
+5V
DRIVE OUT
AUDIO IN
VIDEO IN
AMP OUT
AMP IN
VREF 4V
C205 104
C206 101
C207 22/16
C208 22/16
R203 680
R204
R205
C239 470/10
D201
L204 8R2
+9V

REAR BOARD

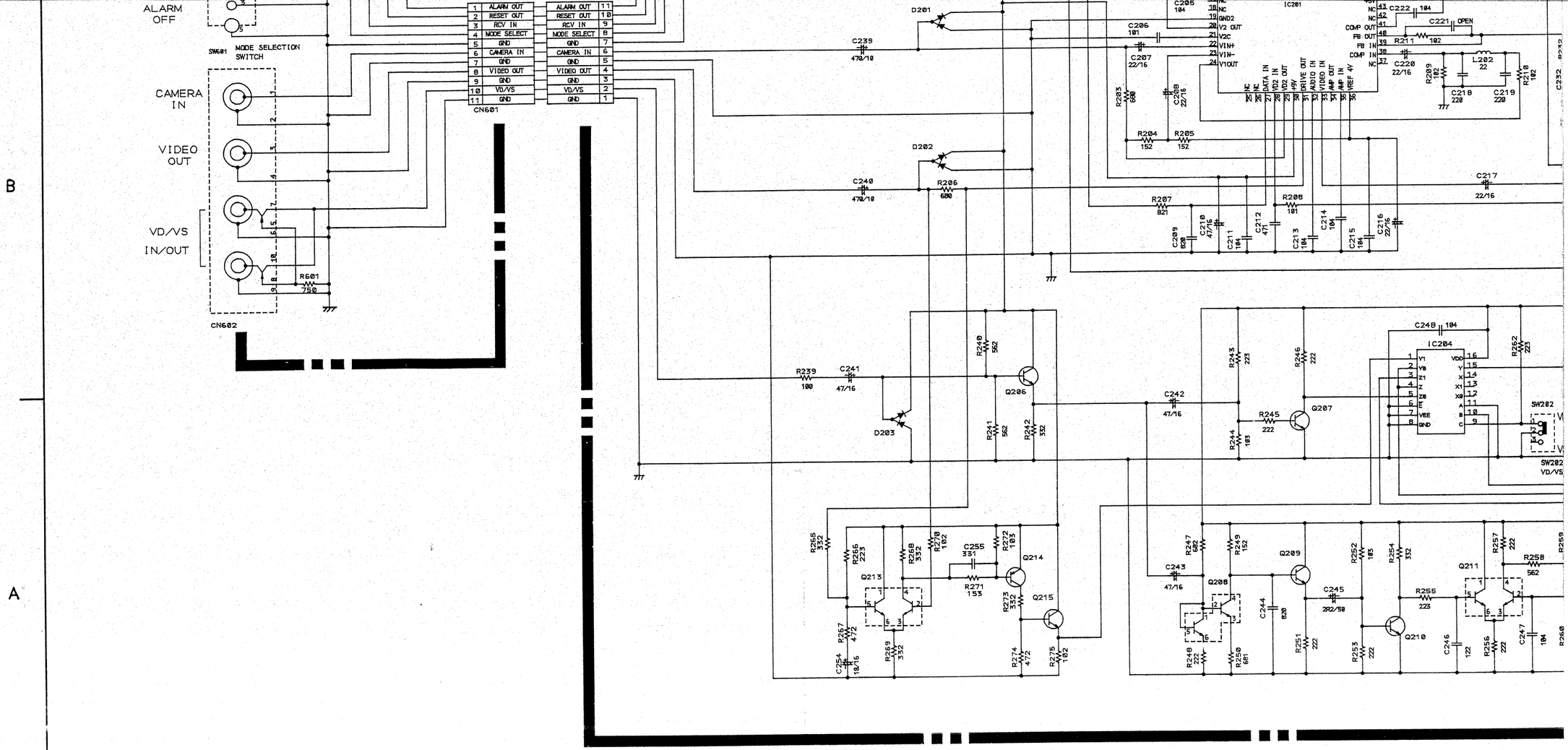
ALARM OUT
GND
RESET OUT
RCV IN
E601

NORMAL
ALARM OFF
SW601 MODE SELECTION SWITCH

CAMERA IN
VIDEO

CN601
CN2

1	ALARM OUT	ALARM OUT	11
2	RESET OUT	RESET OUT	10
3	RCV IN	RCV IN	9
4	MODE SELECT	MODE SELECT	8
5	GND	GND	7
6	CAMERA IN	CAMERA IN	6
7	GND	GND	5
8	VIDEO OUT	VIDEO OUT	4
9	GND	GND	3
10	VD/VS	VD/VS	2
11	GND	GND	1

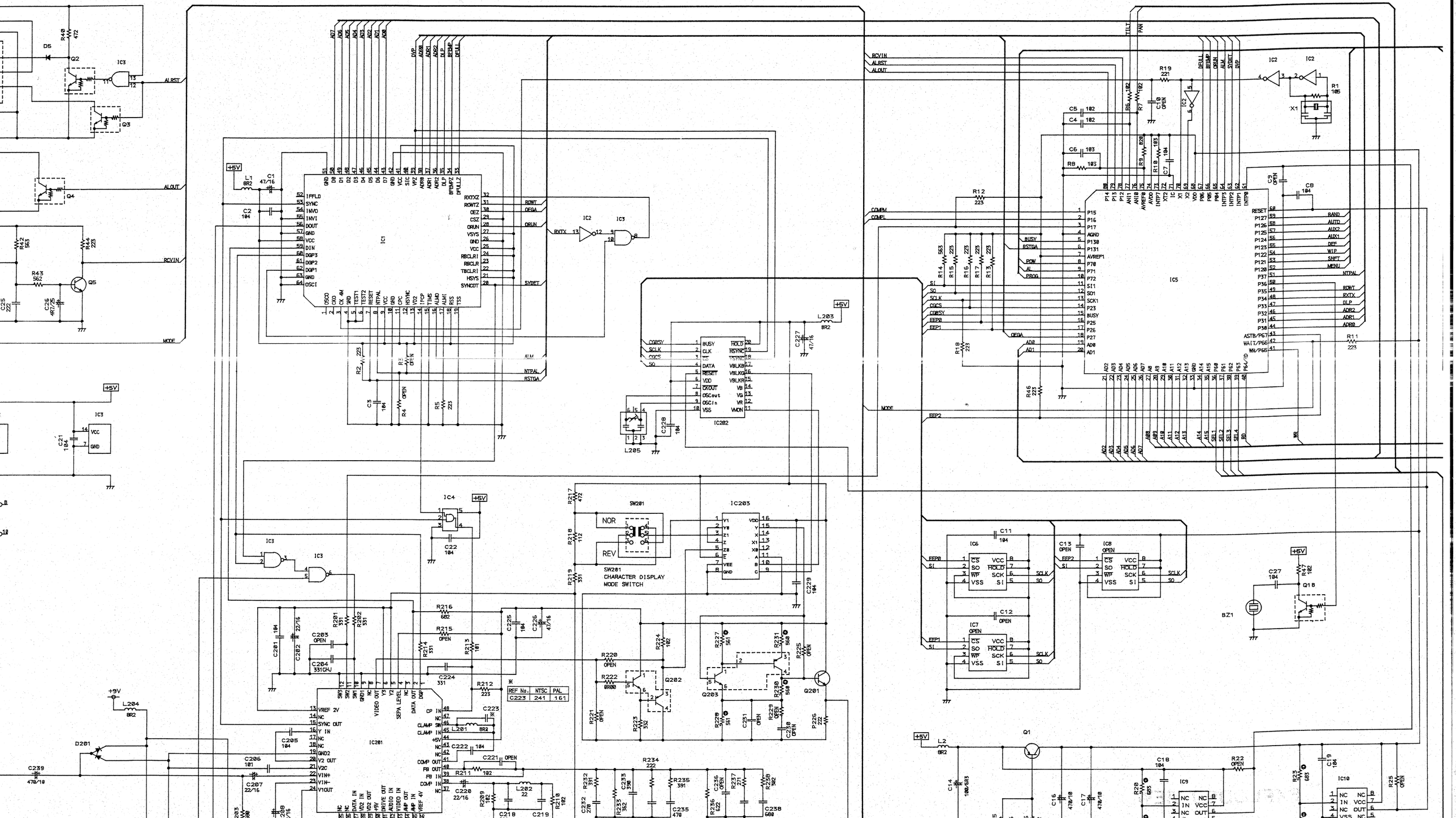


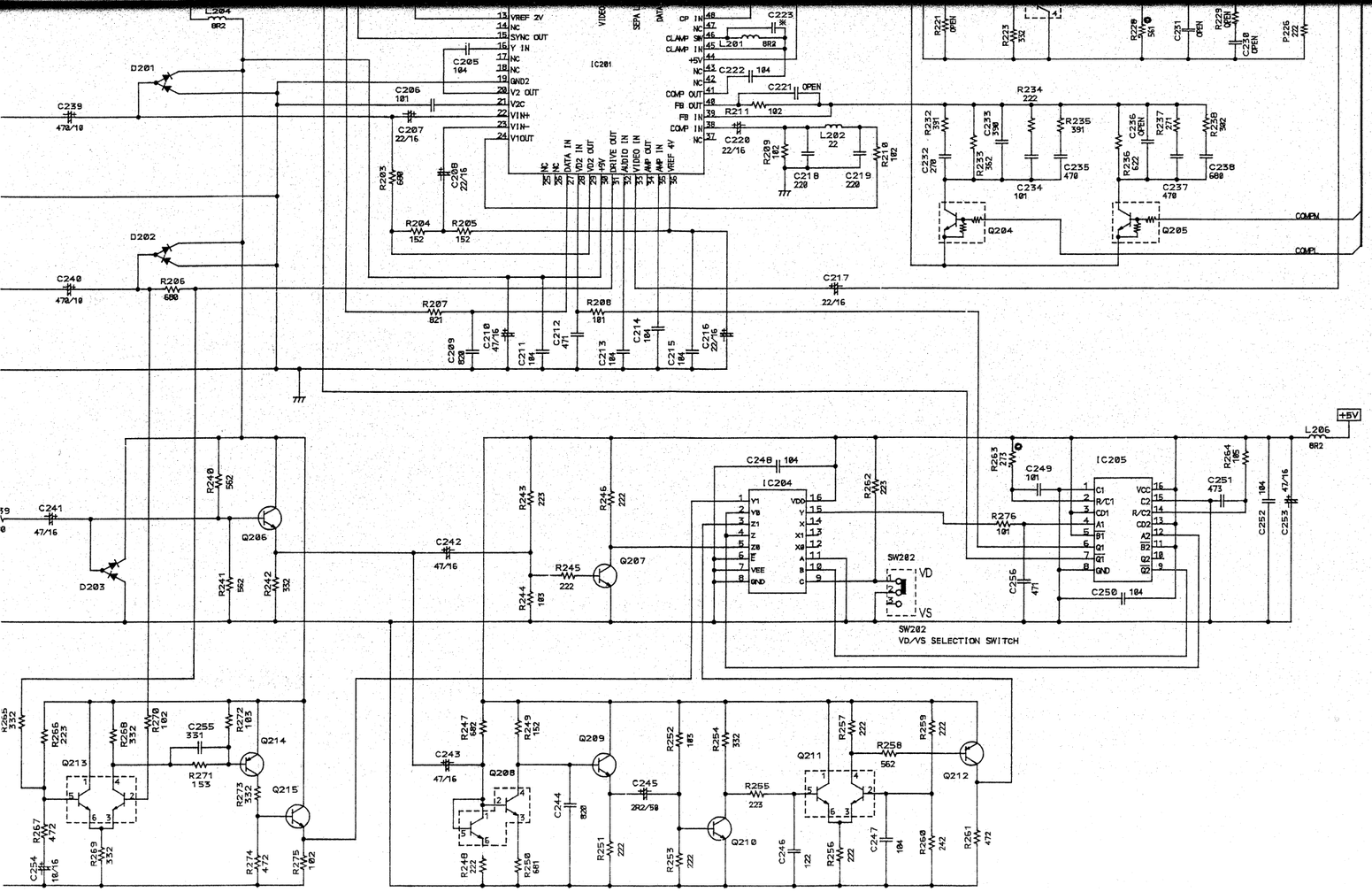
<INDEX>

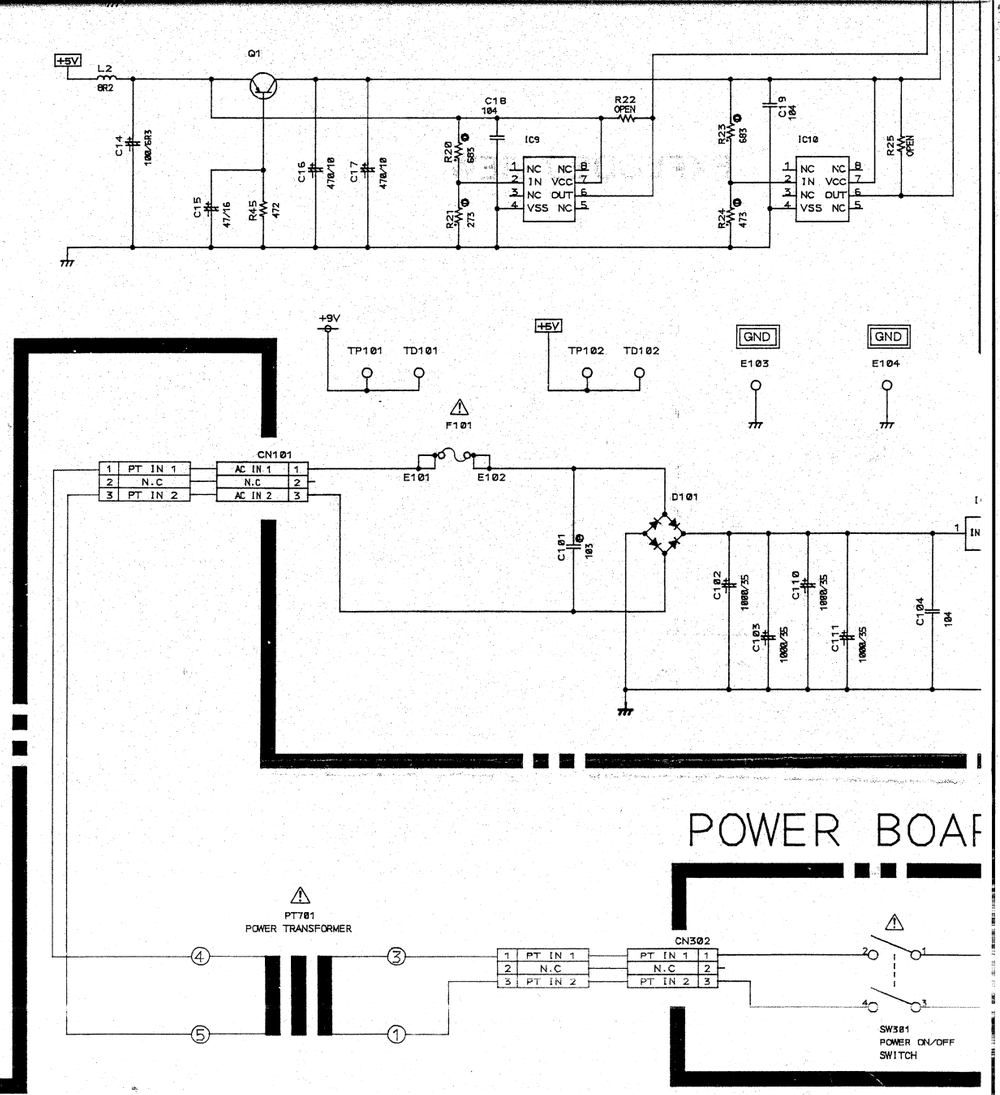
MAIN BOARD

IC1	D3	IC203	C5	Q10	D7	Q204	B4	D1	B7
IC2	D4	IC204	B4	Q11	D7	Q205	B4	D2	B7
IC3	D4	IC205	B4	Q12	D7	Q206	B5	D3	D2
IC4	C4	Q1	B5	Q13	D7	Q207	A3	D4	D2
IC5	D6	Q2	D3	Q14	D7	Q208	A3	D5	E2
IC6	C5	Q3	D3	Q15	D7	Q209	A3	D101	B6
IC9	B6	Q4	D3	Q16	D7	Q210	A4	D201	B3
IC10	B6	Q5	D3	Q17	D7	Q211	A4	D202	B3
IC102	B7	Q6	D7	Q18	C6	Q212	A4	D203	A2
IC103	B7	Q7	D7	Q201	C5	Q213	A2		
IC201	B3	Q8	D7	Q202	C4	Q214	A3		
IC202	C4	Q9	D7	Q203	C4	Q215	A3		

SCHEMATIC DIAGRAM OF MAIN BOARD







3 4 5 6

C203	C5	Q10	D7	Q204	B4	D1	B7
C204	B4	Q11	D7	Q205	B4	D2	B7
C205	B4	Q12	D7	Q206	B5	D3	D2
Q1	B5	Q13	D7	Q207	A3	D4	D2
Q2	D3	Q14	D7	Q208	A3	D5	E2
Q3	D3	Q15	D7	Q209	A3	D101	B6
Q4	D3	Q16	D7	Q210	A4	D201	B3
Q5	D3	Q17	D7	Q211	A4	D202	B3
Q6	D7	Q18	C6	Q212	A4	D203	A2
Q7	D7	Q201	C5	Q213	A2		
Q8	D7	Q202	C4	Q214	A3		
Q9	D7	Q203	C4	Q215	A3		

Note: The value indicated in the schematic diagram should be read as follows:

□ □ □
- 1st. Siginificant Digit (1 - 9)
- 2nd. Significant Digit (0 - 9)
- Multiplier (0 - 5)

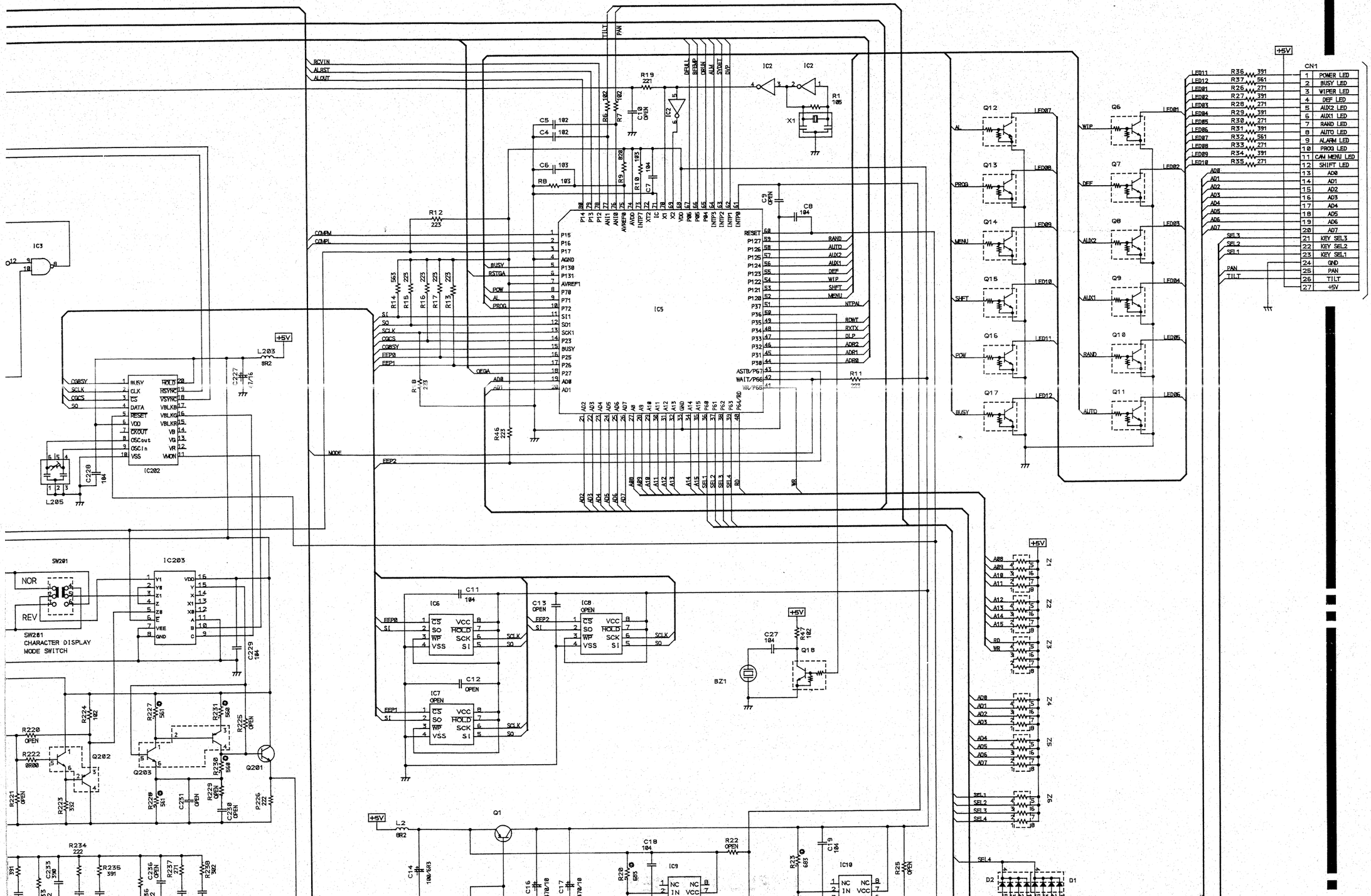
<Example>

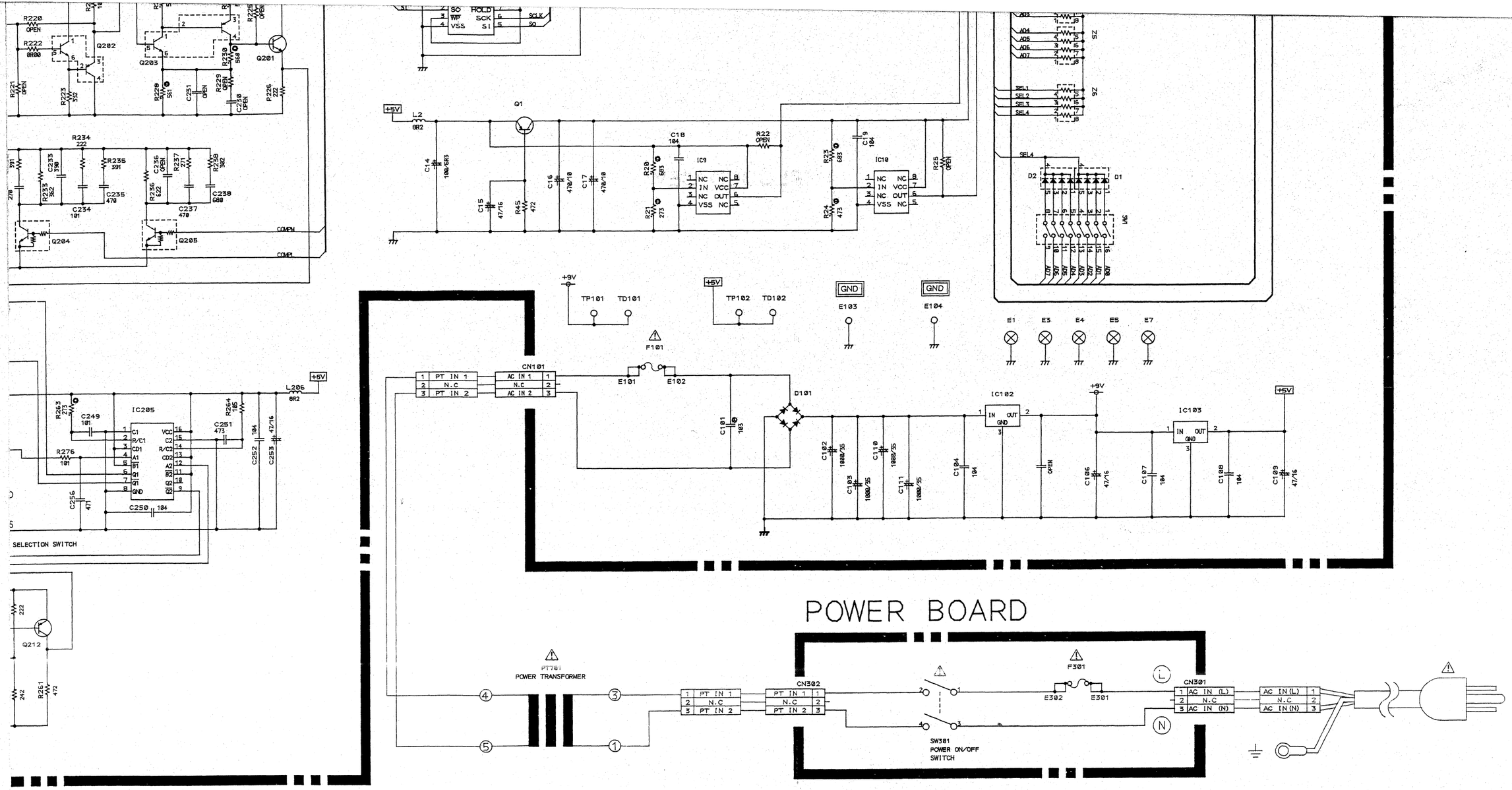
For Resistor:
- 330 → 33 x 10^0 = 33 Ω
- 561 → 56 x 10^1 = 560 Ω
- 123 → 12 x 10^3 = 12k Ω
- 0R00 = 0 Ω

For Capacitor:
- 820 → 82 x 10^0 = 82 pF
- 102 → 10 x 10^2 = 1000 pF = 0.001 μF
- 104 → 10 x 10^4 = 100000 pF = 0.1 μF

The suffix attached to capacitance indicates a type of capacitor.

M OF MAIN BOARD





5 6 7 8

Note: **The value indicated in the schematic diagram should be read as follows:**

□ □ □
- Multiplier (0 - 5)
- 2nd. Significant Digit (0 - 9)
- 1st. Siginificant Digit (1 - 9)

<Example>

For Resistor:

330 → 33 x 10^0 = 33 Ω
561 → 56 x 10^1 = 560 Ω
123 → 12 x 10^3 = 12k Ω
0R00 = 0 Ω

For Capacitor:

820 → 82 x 10^0 = 82 pF
102 → 10 x 10^2 = 1000 pF = 0.001 μF
104 → 10 x 10^4 = 100000 pF = 0.1 μF

The suffix attached to capacitance indicates a type of capacitor.

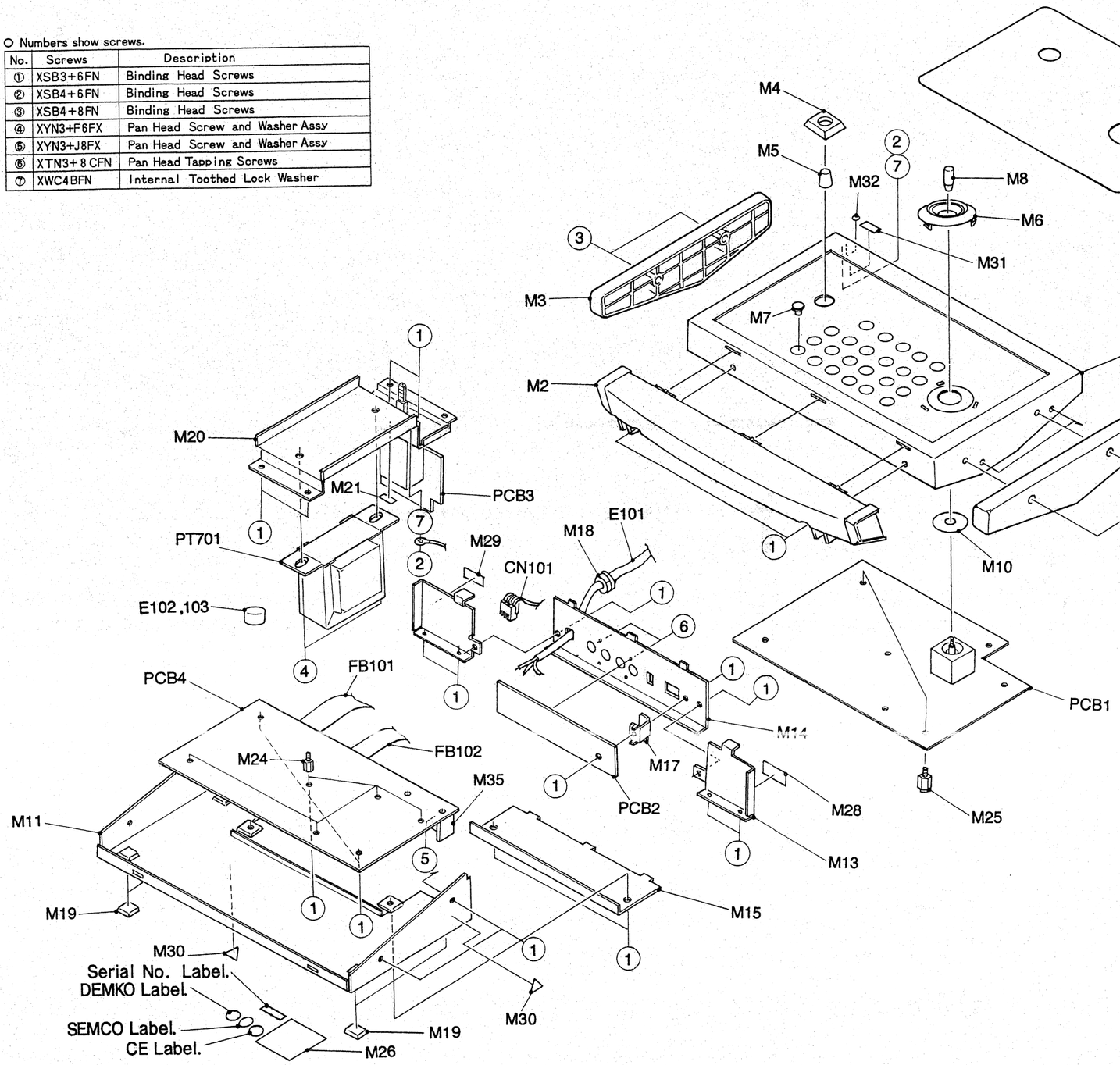
PRODUCT SAFETY NOTICE

COMPONENT IDENTIFIED WITH THE "⚠" MARK HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN SERVICING ANY OF THESE COMPONENTS, IT IS ESSENTIAL THAT ONLY MANUFACTURE'S SPECIFIED PARTS BE USED.

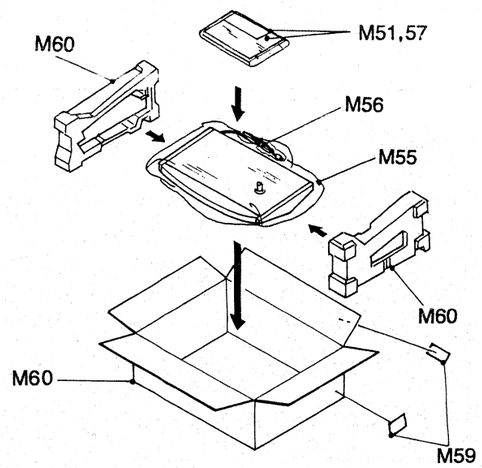
EXPLODED VIEW

○ Numbers show screws.

No.	Screws	Description
①	XSB3+6FN	Binding Head Screws
②	XSB4+6FN	Binding Head Screws
③	XSB4+8FN	Binding Head Screws
④	XYN3+F6FX	Pan Head Screw and Washer Assy
⑤	XYN3+J8FX	Pan Head Screw and Washer Assy
⑥	XTN3+8CFN	Pan Head Tapping Screws
⑦	XWC4BFN	Internal Toothed Lock Washer



PACKAGING



1. Compo
   When r
2. RTL : Re

REF.NO.
FB101
FB102
PT701 ⚠
CN101 ⚠
F301 ⚠
E101 ⚠
E102,103
M1
M2
M3
M4
M5
M6
M7
M8
M9
M10
M11
M12
M13
M14
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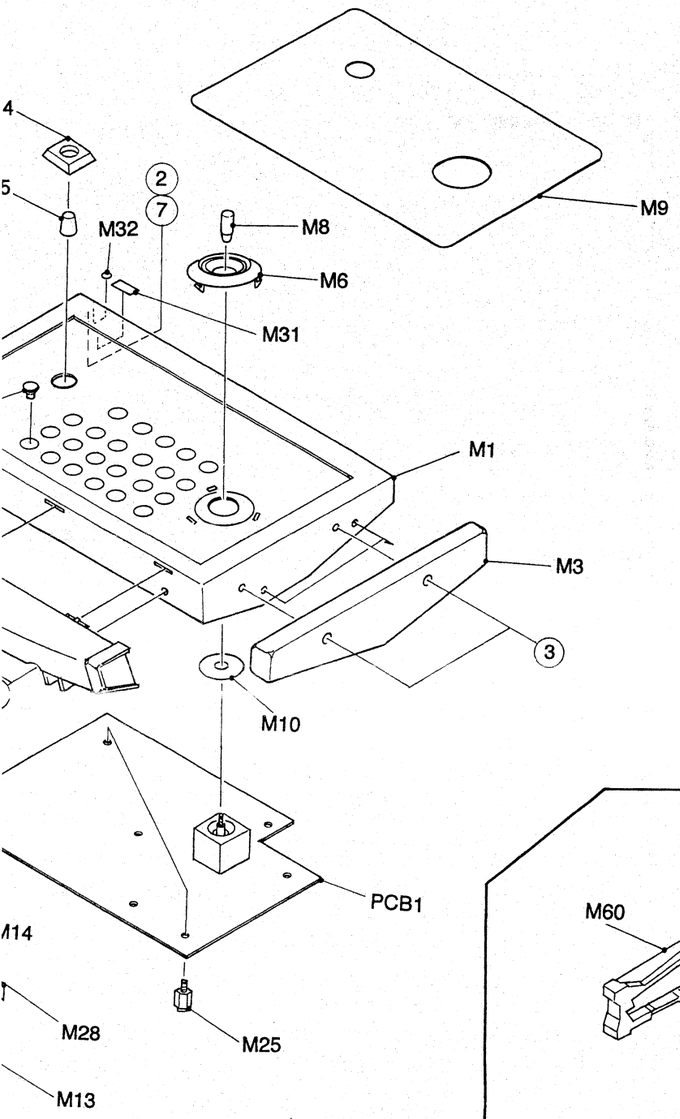
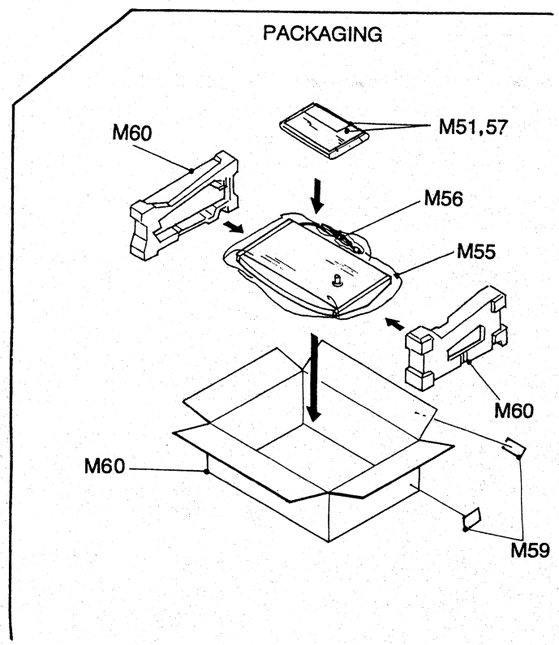
M31
M32

LODED VIEW





REPLACEMENT PARTS LIST

Important Notice

1. Components identified by " ⚠ " mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
2. RTL : Retention Time Limited,

REF.NO.	PART NO.	DESCRIPTION
MISCELLANEOUS		
FB101	YW27B100DGG	Flexible for Main Board CN1 and Switch Board CN501
FB102	YW11B100DGE	Flexible for Main Board CN2 and Rear Board CN601
PT701 ⚠	YWSH3105C	Power Transformer
CN101 ⚠	YWVAR2	Power Connector
F301 ⚠	XBA2C016ET0A	Current Fuse 1.6A 250V
E101 ⚠	YWKP551SXA	AC Power Cable Assy for WV-CU151/A
	YWGBSXBS	AC Power Cable Assy for WV-CU151/B
	YWP242SXGS	AC Power Cable Assy for WV-CU151/C
E102,103	YW840522	Insulator Cap
M1	YWV5EA2081A1	Cover Assy
M2	YWV5EA1367A1	Palm Rest Panel
M3	YWV5EA1368A2	Side Panel (X2)
M4	YWA5DB0020A3	Ornament
M5	YWA5RG0141A3	Switch Knob
M6	YWV5WA2116A3	Positioner Panel
M7	YWV2NA1028A4	Spacer (X22)
M8	YWV5RA0439A4	Positioner Knob
M9	YWV7QA4201A2	Operation Panel
M10	YWV2VA0062A4	Barrier
M11	YWV5EA2079A2	Bottom Cover
M12	YWV5WA2080A3	Rear Cover for Right Side
M13	YWV5WA2113A3	Rear Cover for Left Side
M14	YWV5WA2114A3	Rear Panel
M15	YWV5WA2115A3	Rear Blank Panel
M17	YWV2SA1768A4	Mounting Angle
M18	YWSR5N4	Cord Clamp
M19	YWTM166N08	Rubber Foot
M20	YWV2SA4181A3	Mounting Angle
M21	YWA7SA0689A4	Earth Label
M24	YWV2JA1014A4	Bracing Strut (X5)
M25	YWV2JA1017A4	Bracing Strut (X2)
M26	YWV7QA4198A4	Main Label for WV-CU151/A
	YWV7QA4199A4	Main Label for WV-CU151/B
	YWV7QA4200A4	Main Label for WV-CU151/G
M28	YWV7MA1011A4	Service Caution Label
M29	YFV7MB0099A4	Safety Label
M31	YFV7MA0120A4	Service Caution Label
M32	YWV7SA1274A4	Earth Label

REF.NO.	PART NO.	DESCRIPTION
SWITCH BOARD		
PCB1 (RTL)	YWVU151JKB2A	Printed Circuit Board Assy
D501-509	YW1SS132	Diode
D511-535	YW1SS132	Diode
SW501-509	YWSKHHAR	Tact Switch
SW511-523	YWSKHHAR	Tact Switch
VR501	YWRKJXK1240	Joystick Controller
CN501	YW524922720	27-pin Connector
E501	YWV2NA1029A3	Spacer
E502-506	YWM1866A	Terminal
REAR BOARD		
PCB2 (RTL)	YWVU151JKC2A	Printed Circuit Board Assy
R601	ERDS2TJ750	Carbon 75 ohms 1/4W
SW601	YWSSSF0126L	Slide Switch
CN601	YW524921120	11-pin Connector
CN602	YWP2285B	MODE Selection Switch
E601	YWML800V04P	Terminal
POWER BOARD		
PCB3 (RTL)	YWVU151JKC1A	Printed Circuit Board Assy
SW301 ⚠	YWSDDFA3	Push Switch
E301,302 ⚠	YWSN5053	Fuse Holder
CN301,302	YWB2P3VH	3-pin Connector
MAIN BOARD		
PCB4 (RTL)	YWVU151EKB1A	Printed Circuit Board Assy
IC1	YWCF37808PG	LSI
IC2	YWMC74HCU04F	IC
IC3	YWMC74HC00AF	IC
IC4	YWSC7S08F	IC
IC5	YW78P054G151	IC
IC6	YWX25642S8	IC
IC9,10	YWM51955AFT1	IC
IC102	YWNJM78M09FA	IC
IC103	YWNJM78M05FA	IC

REF.NO.	PART NO.
IC201	YWUPC5022094
IC202	YWBU5999FS
IC203,204	MC74HC4053F
IC205	MC74HC4538AF
Q1	MSB709-QRS
Q2	YWDTC114EK97
Q3,4	DTD114
Q5	MSD601-QRS
Q6-17	DTC123EK
Q18	YWDTC114EK97
Q201	MSD601-QRS
Q202,203	IMZ1T9
Q204,205	YWDTC114EK97
Q206,207	MSD601-QRS
Q208	IMX1
Q209,210	MSD601-QRS
Q211	IMX1
Q212	MSB709-QRS
Q213	IMX1
Q214	MSB709-QRS
Q215	MSD601-QRS
D1,2	YWFMN1
D3-5	YWDAN212K
D101	S1VB10
D201-203	YWDAN217
VS1	ERZCF2MK560
R1	YW2116105JT
R2,5	ERJ6GEYJ223
R6,7	ERJ6GEYJ102
R8	ERJ6GEYJ103
R9	YF2116820JT
R10	ERJ6GEYJ103
R11-13	ERJ6GEYJ223
R14	YF2116563JT
R15-18	ERJ6GEYJ223
R19	YF2116221JT
R20	YWR1220P683D
R21	YWR1220P273D
R23	YWR1220P683D
R24	YWR1220P473D
R26	YF2116271JT
R27	YF2116391JT
R28	YF2116271JT
R29	YF2116391JT
R30	YF2116271JT
R31	YF2116391JT
R32	YF2116561JT
R33	YF2116271JT
R34	YF2116391JT
R35	YF2116271JT
R36	YF2116391JT
R37-39	YF2116561JT
R40	ERJ6GEYJ472
R41	YF2116561JT
R42	YF2116563JT

REPLACEMENT PARTS LIST

Notice

ents identified by " ⚠ " mark have special characteristics important for safety.
eplacing any of these components, use only manufacturer's specified parts.
tention Time Limited,

PART NO.	DESCRIPTION
MISCELLANEOUS	
YW27B100DGG	Flexible for Main Board CN1 and Switch Board CN501
YW11B100DGE	Flexible for Main Board CN2 and Rear Board CN601
YWSH3105C	Power Transformer
YWVAR2	Power Connector
XBA2C016ET0A	Current Fuse 1.6A 250V
YWKP551SXA	AC Power Cable Assy for WV-CU151/A
YWGBSXBS	AC Power Cable Assy for WV-CU151/B
YWP242SXGS	AC Power Cable Assy for WV-CU151/C
YW840522	Insulator Cap
YWV5EA2081A1	Cover Assy
YWV5EA1367A1	Palm Rest Panel
YWV5EA1368A2	Side Panel (X2)
YWA5DB0020A3	Ornament
YWA5RG0141A3	Switch Knob
YWV5WA2116A3	Positioner Panel
YWV2NA1028A4	Spacer (X22)
YWV5RA0439A4	Positioner Knob
YWV7QA4201A2	Operation Panel
YWV2VA0062A4	Barrier
YWV5EA2079A2	Bottom Cover
YWV5WA2080A3	Rear Cover for Right Side
YWV5WA2113A3	Rear Cover for Left Side
YWV5WA2114A3	Rear Panel
YWV5WA2115A3	Rear Blank Panel
YWV2SA1768A4	Mounting Angle
YWSR5N4	Cord Clamp
YWTM166N08	Rubber Foot
YWV2SA4181A3	Mounting Angle
YWA7SA0689A4	Earth Label
YWV2JA1014A4	Bracing Strut (X5)
YWV2JA1017A4	Bracing Strut (X2)
YWV7QA4198A4	Main Label for WV-CU151/A
YWV7QA4199A4	Main Label for WV-CU151/B
YWV7QA4200A4	Main Label for WV-CU151/G
YWV7MA1011A4	Service Caution Label
YFV7MB0099A4	Safety Label
YFV7MA0120A4	Service Caution Label
YWV7SA1274A4	Earth Label

REF.NO.	PART NO.	DESCRIPTION
SWITCH BOARD		
PCB1 (RTL)	YWVU151JKB2A	Printed Circuit Board Assy
D501-509	YW1SS132	Diode
D511-535	YW1SS132	Diode
SW501-509	YWSKHHAR	Tact Switch
SW511-523	YWSKHHAR	Tact Switch
VR501	YWRKJXK1240	Joystick Controller
CN501	YW524922720	27-pin Connector
E501	YWV2NA1029A3	Spacer
E502-506	YWM1866A	Terminal
REAR BOARD		
PCB2 (RTL)	YWVU151JKC2A	Printed Circuit Board Assy
R601	ERDS2TJ750	Carbon 75 ohms 1/4W
SW601	YWSSSF0126L	Slide Switch
CN601	YW524921120	11-pin Connector
CN602	YWP2285B	MODE Selection Switch
E601	YWML800V04P	Terminal
POWER BOARD		
PCB3 (RTL)	YWVU151JKC1A	Printed Circuit Board Assy
SW301 ⚠	YWSDDFA3	Push Switch
E301,302 ⚠	YWSN5053	Fuse Holder
CN301,302	YWB2P3VH	3-pin Connector
MAIN BOARD		
PCB4 (RTL)	YWVU151EKB1A	Printed Circuit Board Assy
IC1	YWCF37808PG	LSI
IC2	YWMC74HCU04F	IC
IC3	YWMC74HC00AF	IC
IC4	YWSC7S08F	IC
IC5	YW78P054G151	IC
IC6	YWX25642S8	IC
IC9,10	YWM51955AFT1	IC
IC102	YWNJM78M09FA	IC
IC103	YWNJM78M05FA	IC

REF.NO.	PART NO.	DESCRIPTION
IC201	YWUPC5022094	Custom IC
IC202	YWBU5999FS	IC
IC203,204	MC74HC4053F	IC
IC205	MC74HC4538AF	IC
Q1	MSB709-QRS	Transistor
Q2	YWDTC114EK97	Transistor
Q3,4	DTD114	Transistor
Q5	MSD601-QRS	Transistor
Q6-17	DTC123EK	Transistor
Q18	YWDTC114EK97	Transistor
Q201	MSD601-QRS	Transistor
Q202,203	IMZ1T9	Transistor
Q204,205	YWDTC114EK97	Transistor
Q206,207	MSD601-QRS	Transistor
Q208	IMX1	Transistor
Q209,210	MSD601-QRS	Transistor
Q211	IMX1	Transistor
Q212	MSB709-QRS	Transistor
Q213	IMX1	Transistor
Q214	MSB709-QRS	Transistor
Q215	MSD601-QRS	Transistor
D1,2	YWFMN1	Diode
D3-5	YWDAN212K	Diode
D101	S1VB10	Diode
D201-203	YWDAN217	Diode
VS1	ERZCF2MK560	ZNR
R1	YW2116105JT	Carbon 1M ohms 1/10W
R2,5	ERJ6GEYJ223	Carbon 22K ohms 1/10W
R6,7	ERJ6GEYJ102	Carbon 1K ohms 1/10W
R8	ERJ6GEYJ103	Carbon 10K ohms 1/10W
R9	YF2116820JT	Carbon 82 ohms 1/10W
R10	ERJ6GEYJ103	Carbon 10K ohms 1/10W
R11-13	ERJ6GEYJ223	Carbon 22K ohms 1/10W
R14	YF2116563JT	Carbon 56K ohms 1/10W
R15-18	ERJ6GEYJ223	Carbon 22K ohms 1/10W
R19	YF2116221JT	Carbon 220 ohms 1/10W
R20	YWR1220P683D	Metal 68K ohms
R21	YWR1220P273D	Metal 27K ohms
R23	YWR1220P683D	Metal 68K ohms
R24	YWR1220P473D	Metal 47K ohms
R26	YF2116271JT	Carbon 270 ohms 1/10W
R27	YF2116391JT	Carbon 390 ohms 1/10W
R28	YF2116271JT	Carbon 270 ohms 1/10W
R29	YF2116391JT	Carbon 390 ohms 1/10W
R30	YF2116271JT	Carbon 270 ohms 1/10W
R31	YF2116391JT	Carbon 390 ohms 1/10W
R32	YF2116561JT	Carbon 560 ohms 1/10W
R33	YF2116271JT	Carbon 270 ohms 1/10W
R34	YF2116391JT	Carbon 390 ohms 1/10W
R35	YF2116271JT	Carbon 270 ohms 1/10W
R36	YF2116391JT	Carbon 390 ohms 1/10W
R37-39	YF2116561JT	Carbon 560 ohms 1/10W
R40	ERJ6GEYJ472	Carbon 4.7K ohms 1/16W
R41	YF2116561JT	Carbon 560 ohms 1/10W
R42	YF2116563JT	Carbon 56K ohms 1/10W

REF.NO.	PART NO.	DESCRIPTION
R43	ERJ6GEYJ562	Carbon 5.6K ohms 1/10W
R44	ERJ6GEYJ223	Carbon 22K ohms 1/10W
R45	ERJ6GEYJ472	Carbon 4.7K ohms 1/16W
R46	ERJ6GEYJ223	Carbon 22K ohms 1/10W
R47	ERJ6GEYJ102	Carbon 1K ohms 1/10W
R201,202	YF2116331JT	Carbon 330 ohms 1/10W
R203	YF2116680JT	Carbon 68 ohms 1/10W
R204,205	YF2116152JT	Carbon 1.5K ohms 1/10W
R206	YF2116680JT	Carbon 68 ohms 1/10W
R207	YF2116821GT	Carbon 820 ohms 1/10W
R208	YF2116101JT	Carbon 100 ohms 1/10W
R209-211	ERJ6GEYJ102	Carbon 1K ohms 1/10W
R212	ERJ6GEYJ223	Carbon 22K ohms 1/10W
R213	YF2116101JT	Carbon 100 ohms 1/10W
R214	YF2116331JT	Carbon 330 ohms 1/10W
R216	YF2116682JT	Carbon 6.8K ohms 1/10W
R217	ERJ6GEYJ472	Carbon 4.7K ohms 1/16W
R218	YF2116112JT	Carbon 1.1K ohms 1/10W
R219	YF2116331JT	Carbon 330 ohms 1/10W
R222	ERJ6GEY0R00	Carbon 1 ohms 1/10W
R223	YF2116332JT	Carbon 3.3K ohms 1/10W
R224	ERJ6GEYJ102	Carbon 1K ohms 1/10W
R226	YF2116222GT	Carbon 2.2K ohms 1/10W
R227,228	YWR1220P561D	Metal 560 ohms
R230,231	R1220P560D	Metal 56 ohms
R232	YF2116391JT	Carbon 390 ohms 1/10W
R233	YF2116362JT	Carbon 3.6K ohms 1/10W
R234	YF2116222GT	Carbon 2.2K ohms 1/10W
R235	YF2116391JT	Carbon 390 ohms 1/10W
R236	YF2116622JT	Carbon 6.2K ohms 1/10W
R237	YF2116271JT	Carbon 270 ohms 1/10W
R238	YF2116302GT	Carbon 3K ohms 1/10W
R239	YF2116100JT	Carbon 10 ohms 1/10W
R240,241	ERJ6GEYJ562	Carbon 5.6K ohms 1/10W
R242	YF2116332JT	Carbon 3.3K ohms 1/10W
R243	ERJ6GEYJ223	Carbon 22K ohms 1/10W
R244	ERJ6GEYJ103	Carbon 10K ohms 1/10W
R245,246	YF2116222GT	Carbon 2.2K ohms 1/10W
R247	YF2116682JT	Carbon 6.8K ohms 1/10W
R248	YF2116222GT	Carbon 2.2K ohms 1/10W
R249	YF2116152JT	Carbon 1.5K ohms 1/10W
R250	YF2116681JT	Carbon 680 ohms 1/10W
R251	YF2116222GT	Carbon 2.2K ohms 1/10W
R252	ERJ6GEYJ103	Carbon 10K ohms 1/10W
R253	YF2116222GT	Carbon 2.2K ohms 1/10W
R254	YF2116332JT	Carbon 3.3K ohms 1/10W
R255	ERJ6GEYJ223	Carbon 22K ohms 1/10W
R256,257	YF2116222GT	Carbon 2.2K ohms 1/10W
R258	ERJ6GEYJ562	Carbon 5.6K ohms 1/10W
R259	YF2116222GT	Carbon 2.2K ohms 1/10W
R260	YW2116242JT	Carbon 2.4K ohms 1/10W
R261	ERJ6GEYJ472	Carbon 4.7K ohms 1/16W
R262	ERJ6GEYJ223	Carbon 22K ohms 1/10W
R263	YWR1220P273D	Metal 27K ohms
R264	YW2116105JT	Carbon 1M ohms 1/10W

REF.NO.	PART NO.	DESCRIPTION	
R265	YF2116332JT	Carbon	3.3K ohms 1/10W
R266	ERJ6GEYJ223	Carbon	22K ohms 1/10W
R267	ERJ6GEYJ472	Carbon	4.7K ohms 1/16W
R268,269	YF2116332JT	Carbon	3.3K ohms 1/10W
R270	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R271	YF2116153JT	Carbon	15K ohms 1/10W
R272	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R273	YF2116332JT	Carbon	3.3K ohms 1/10W
R274	ERJ6GEYJ472	Carbon	4.7K ohms 1/16W
R275	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R276	YF2116101JT	Carbon	100 ohms 1/10W
Z1-6	EXBV8V103J	Block Resistor	
C1	EEVHB1C470P	Electrolytic	47 µF 16V
C2,3	YF400104FZT	Ceramic	0.1 µF
C4,5	YW400102CHJT	Ceramic	1000pF
C6	YF400103XKT	Ceramic	0.01 µF
C7,8	YF400104FZT	Ceramic	0.1 µF
C11	YF400104FZT	Ceramic	0.1 µF
C14	EEVHB0J101P	Electrolytic	100 µF 6.3V
C15	EEVHB1C470P	Electrolytic	47 µF 16V
C16,17	EEVHA1A471P	Electrolytic	470 µF
C18-22	YF400104FZT	Ceramic	0.1 µF
C23-25	YF400222XKT	Ceramic	2200 pF
C26	EEVHB1E4R7R	Electrolytic	4.7 µF 25V
C27	YF400104FZT	Ceramic	0.1 µF
C101	ECQP1103GZ	Plastic	0.01 µF 100V
C102,103	ECA1VHG102	Electrolytic	1000 µF
C104	YF400104FZT	Ceramic	0.1 µF
C106	EEVHB1C470P	Electrolytic	47 µF 16V
C107,108	YF400104FZT	Ceramic	0.1 µF
C109	EEVHB1C470P	Electrolytic	47 µF 16V
C110,111	ECA1VHG102	Electrolytic	1000 µF
C201	YF400104FZT	Ceramic	0.1 µF
C202	EEVHB1C220R	Electrolytic	22 µF 16V
C204	YF400331CHJT	Ceramic	330 pF
C205	YF400104FZT	Ceramic	0.1 µF
C206	YF400101CHJT	Ceramic	100 pF
C207,208	EEVHB1C220R	Electrolytic	22 µF 16V
C209	YF400820CHJT	Ceramic	82 pF
C210	EEVHB1C470P	Electrolytic	47 µF 16V
C211	YF400104FZT	Ceramic	0.1 µF
C212	YF400471CHJT	Ceramic	470 pF
C213-215	YF400104FZT	Ceramic	0.1 µF
C216,217	EEVHB1C220R	Electrolytic	22 µF 16V
C218,219	YF400220CHJT	Ceramic	22 pF
C220	EEVHB1C220R	Electrolytic	22 µF 16V
C222	YF400104FZT	Ceramic	0.1 µF
C223	YW400161CHJT	Ceramic	160 pF
C224	YF400331CHJT	Ceramic	330 pF
C225	YF400104FZT	Ceramic	0.1 µF
C226,227	EEVHB1C470P	Electrolytic	47 µF 16V
C228,229	YF400104FZT	Ceramic	0.1 µF
C232	YF400270CHJT	Ceramic	27 pF
C233	YF400390CHJT	Ceramic	39 pF
C234	YF400101CHJT	Ceramic	100 pF

REF.NO.	PART NO.	DESCRIPTION	
C235	YF400470CHJT	Ceramic	47 pF
C237	YF400470CHJT	Ceramic	47 pF
C238	YF400680CHJT	Ceramic	68 pF
C239,240	EEVHA1A471P	Electrolytic	470 µF 10V
C241-243	EEVHB1C470P	Electrolytic	47 µF 16V
C244	YF400820CHJT	Ceramic	82 pF
C245	EEVHB1H2R2R	Electrolytic	2.2 µF 50V
C246	YF400122XKT	Ceramic	1200 pF
C247,248	YF400104FZT	Ceramic	0.1 µF
C249	YF400101CHJT	Ceramic	100 pF
C250	YF400104FZT	Ceramic	0.1 µF
C251	YF400473FZT	Ceramic	0.047 µF
C252	YF400104FZT	Ceramic	0.1 µF
C253	EEVHB1C470P	Electrolytic	47 µF 16V
C254	EEVHB1C100R	Electrolytic	10 µF 16V
C255	YF400331CHJT	Ceramic	330 pF
C256	YF400471CHJT	Ceramic	470 pF
L1,2	YWNL328R2J	Coil	8.2 µH
L201	YWNL328R2J	Coil	8.2 µH
L202	YWNL32220J	Coil	22 µH
L203,204	YWNL328R2J	Coil	8.2 µH
L205	YWTLC5CCF061	Coil	
L206	YWNL328R2J	Coil	8.2 µH
BZ1	YWPKM22EPP41	Buzzer	
SW1	YWKSD08S	Dip Switch	
SW2	YWSSSF0126L	Slide Switch	
SW201	YWSSSS822AT	Slide Switch	
SW202	YWSSSS21212	Slide Switch	
X1	YWCSTCS4MG	Crystal Oscillator	
CN1	YW520442710	27-pin Connector	
CN2	YW520441110	11-pin Connector	
CN101	YWB2P3SVH	3-pin Connector	
E1	YWM1866A	Terminal	
E3-5	YWM1866A	Terminal	
E7	YWM1866A	Terminal	
E101,102 ⚠	YWSN5053	Fuse Holder	
E103,104	YVL437TM027	Terminal	
F101 ⚠	XBA2C08ET0A	Current Fuse	0.8A 250V
TP101,102	YWRCT2125TPV	Test- Pin	
M35	YWV7DA0277A4	Heat Sink	

ACCESSORY PARTS/PACKAGING PARTS

M51	YWV8QA4184AN	Operating Instructions
M55	XZB45X63C05	Polyethylene Bag
M56	YWT20X35C03	Polyethylene Bag
M57	YWPE26X40C05	Polyethylene Bag
M59	YWV8FA0200A4	Packaging Label for WV-CU151/B
M60	YWV9CA3123AN	Packaging Assy